JVC

SERVICE MANUAL

STEREO CASSETTE DECK

MODEL TD-X501 A/B/C/E/G/J/U

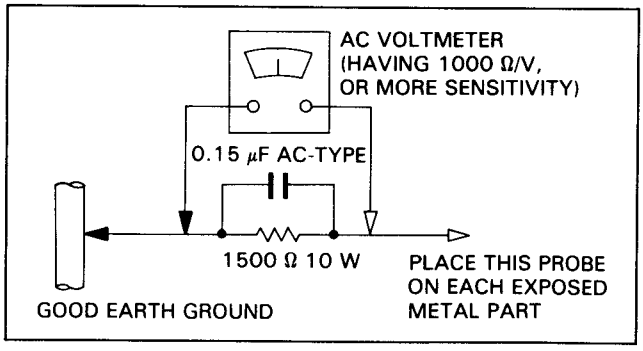
Contents

No. 4262
February 1986

Safety Precautions

1. The design of this product contains special hardware. Many circuits and components specially for safety purposes.
   For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Repacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by (⚠) on the schematics and parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list in Service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and/or the like to be separated from live parts, high temperature part, moving parts and/or sharp edges for the prevention of electric shock and fire hazard.
   When service is required, the original lead routing and dress should be observed, and they should be confirmed to be returned to normal, after re-assembling.
5. Leakage current check
   (Safety for electrical shock hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the Products (antenna terminals, knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method.
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1500 Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.)
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.).
     This corresponds to 0.5 mA AC (r.m.s.).



Features

1. **FLIP REVERSE SYSTEM**
   - Rotary combination for recording/playback (SA) and erase head.
   - Quick reverse mechanism using infrared sensor.
2. **2-motor full logic mechanism**
   - Exclusive motor for mechanism drive.
   - Silent mechanism.
3. **DOLBY* B-C NR (Noise Reduction) system**
4. **2-color FL peak level meter with digital peak indicator**
   - Peak hold facility.
   - Call button.
5. **Computer shift control system**
   - BLANK SKIP
   - INDEX SCAN
   - REW AUTO PLAY
   - BLANK SEARCH
6. **Microcomputer-controlled mechanism**
   - Auto REC MUTE facility
   - Mechanism mode indicators
7. **Single music scan mechanism for either direction**
   "Under license from Staar S.A., Brussels Belgium."
8. **SYNCHRO Terminal facility**

*Noise reduction system manufactured under license from DOLBY Laboratories Licensing Corporation.
*"DOLBY" and the double-D symbol are trademarks of DOLBY Laboratories Licensing Corporation.

Specifications

Type	: Stereo cassette deck
Track system	: 4-track, 2-channel
Tape speed	: 4.8 cm/sec (1-7/8 inch/sec)
Frequency response	: (−20 dB recording) Metal tape: 30−16,000 Hz (±3 dB) 20−17,000 Hz CrO_2 tape: 30−16,000 Hz (±3 dB) 20−17,000 Hz Normal tape: 30−15,000 Hz (±3 dB) 20−16,000 Hz (0 dB recording) Metal tape: 30−12,500 Hz (±3 dB) CrO_2 tape: 30−8,000 Hz (±3 dB) Normal tape: 30−8,000 Hz (±3 dB)
S/N ratio	: 58 dB (S = 1 kHz, K3 = 3%, N = A-weighted, Metal tape) The S/N is improved by about 15 dB at 500 Hz and by max. 20 dB at 1 kHz ~ 10 kHz with DOLBY C NR on and improved by 5 dB at 1 kHz and by 10 dB at above 5 kHz with DOLBY B NR on. Improvement of MOL 4 dB at 10 kHz with DOLBY C NR on.
Wow and flutter (Forward direction)	: 0.06% (WRMS) 0.17% (DIN 45 500)
Crosstalk	: 55 dB (1 kHz)
Harmonic distortion	: K3; 0.5% THD; 1.0% (Metal tape, 1 kHz 0 dB)
Channel separation	: 40 dB (1 kHz)
Heads	: SA head (for record/playback)/ 2-Gap ferrite head (for erasing) combination head × 1
Motor	: Electric governed DC motor (for capstan and reel) × 1 DC Motor (for FF & Rewind) × 1 DC Motor (for Mechanical drive) × 1
Fast wind time	: Approx. 95 sec. with C-60 cassette
Input terminals	
MIC × 2	: Max. sensitivity; 0.4 mV (−68 dBV) Matching impedance; 600 Ω−10 kΩ
LINE IN × 2	: Min. input level; 80 mV Input impedance; 50 kΩ
Output terminals	
LINE OUT × 2	: Output level; 300 mV Output impedance; 5 kΩ
PHONES × 1	: Output level; 0.3 mW/8 Ω Matching impedance; 8 Ω−1 kΩ
Other terminals	
SYNCHRO × 2	
Power requirement	
TD-X501 A/B	: AC 240 V, 50/60 Hz
TD-X501 E/G	: AC 220 V, 50/60 Hz
TD-X501 C/J	: AC 120 V, 60 Hz
TD-X501 U	: AC 230/127/110 V, 50/60 Hz
Power consumption	: 12 W
Dimensions	: 435 mm (17-1/8") W 109 mm (4-3/8") H 229 mm (9") D (with feet, buttons, switches)
Weight	: Approx. 3.9 kg (8.6 lbs)

Design and specifications are subject to change without notice.

Names of Parts and Their Functions

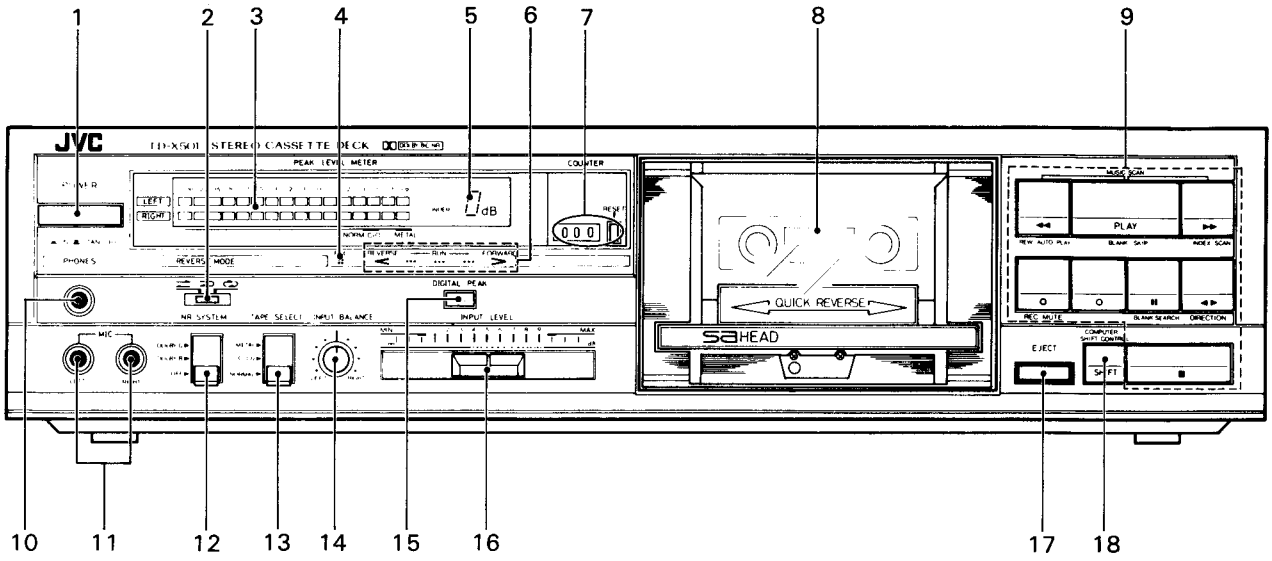


Fig. 1

1. POWER switch

2. REVERSE MODE switch
Select a single of full record/playback mode, or continuous play mode.
- ⇆ : To play continuously sides A and B.
- ⇉ : To fully paly or record sides A and B.
- → : For a single-side recording or playback.

3. PEAK LEVEL METER
This indicates the record input level when recording and recorded signal level on the tape when playing back. This meter holds the peak level about 2 seconds.

4. REC indicator
Lights in the recording and record-pause modes; flashes during the record muting operation.

5. DIGITAL PEAK indicator
This is interlocked with the PEAK LEVEL meters and gives a direct digital readout of the peak recording input or playback level.

6. Mechanism mode indicators
- Direction (REVERSE </FORWARD >)
- Tape RUN (the center indicator lights during the pause mode).

7. TAPE COUNTER and RESET button

8. Cassette holder

9. Cassette operation buttons

◀◀ (rewind):
Press to wind the tape quickly from right to left. Press this and the PLAY button for music scanning.

PLAY:
Press to play back tape. Also press to record or music scan.

▶▶ (fast forward):
Press to wind the tape quickly from left to right. Press this and the PLAY button for music scanning.

O REC MUTE:
Press to make about a 4 — 5-second nonrecorded section between tunes.

O (record):
Press this button together with the PLAY button when recording.

▮▮ (pause):
Press to stop the tape temporarily. To release the pause mode press the PLAY button.

◀ ▶ DIRECTION
Press to change the direction of tape travel. The direction is shown by the indicator (◀ or ▶).

■ (stop):
Press to stop the tape.

10. PHONES jack
Connect headphones (with an impedance of 8 Ω — 1 kΩ).

11. MIC jacks (L, R)
Connect microphones (with an impedance of 600 Ω to 10 kΩ) to these jacks.
With microphones connected to these jacks, the input to LINE IN (REC) or DIN for G version terminals is cut off automatically.

12. NR SYSTEM switch

13. TAPE SELECT switch
Select the switch position according to the tape to be used during recording and playback.

14. INPUT BALANCE control
Adjust the balance between the left and right channels of recording input levels. The center click position is the standard position.

15. DIGITAL PEAK button
Press to call up the stored peak level. When this button is pressed again while the DIGITAL PEAK indicator is flickering, the new value is reset in the indicator and it is held in memory.

16. INPUT LEVEL control
This controls the right and left channel recording input levels simultaneously. dB indications are provided between 4 and 9 for approximate level compensation of the DIGITAL PEAK indicator.

17. EJECT button
Press to open the cassette holder.

18. SHIFT button
Use when the computer shift control system (i.e. blank skip, index scan, rewind auto play or blank search function) is operating.

Location of Main Parts

Top View

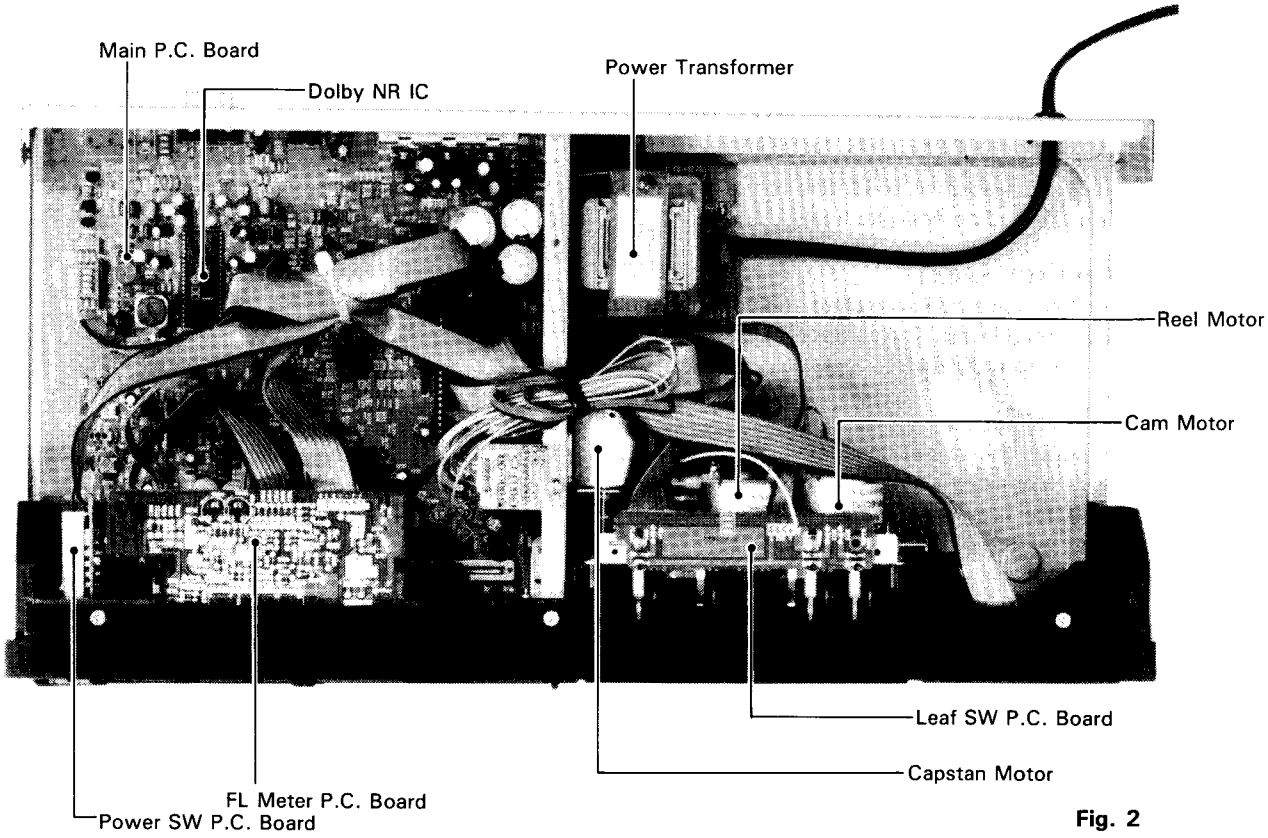


Fig. 2

Bottom View

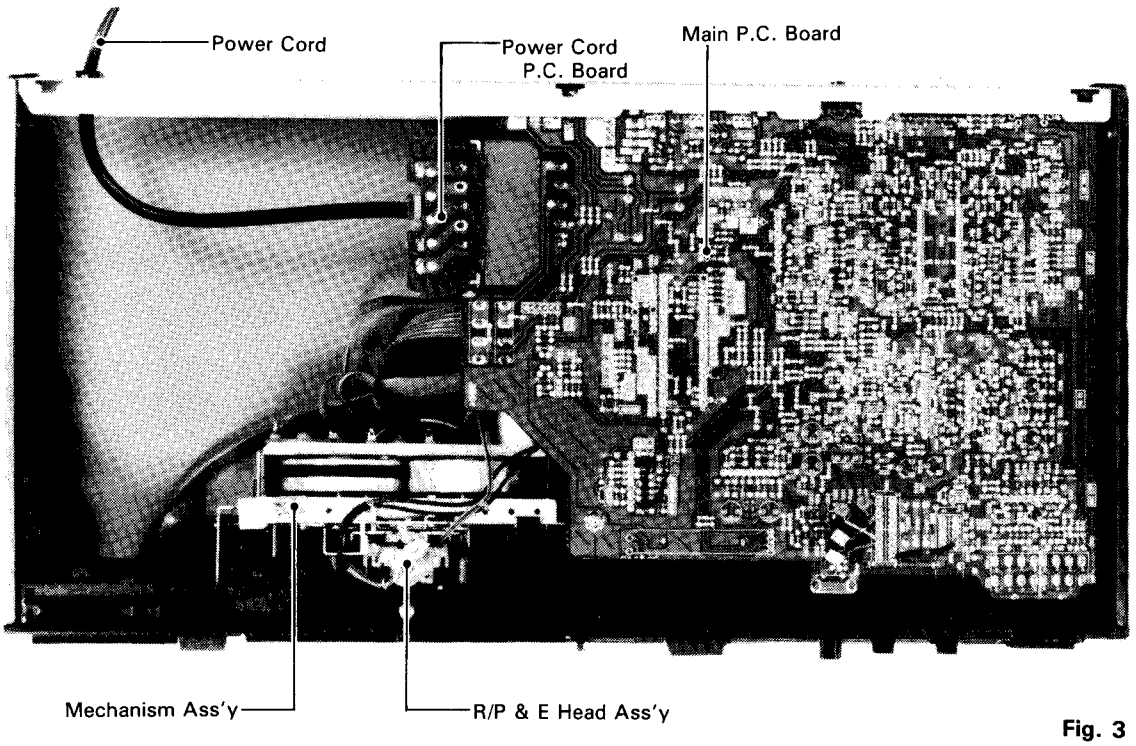


Fig. 3

Removal of Main Parts

■ Cabinet Section

1. Top cover and bottom covers
   1) Remove six screws (41) on both the sides.
   2) Remove one screw (42) from the back.
   3) Remove three screws (47) and (51) from the bottom cover.
   4) Remove three hooks from the rear panel.

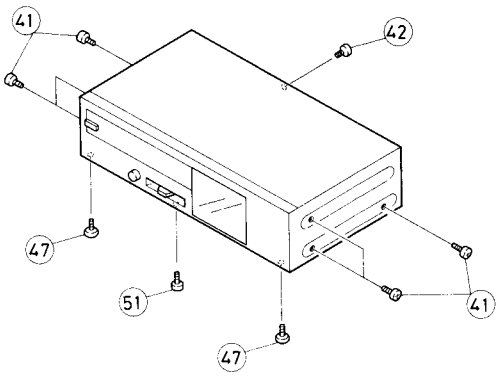


Fig. 4

2. Mechanism Ass'y
   (When removing the mehcnaism from the set)
   1) Remove four screws (56) fixing the mechanism.
   2) Open the cassette door and remove the mechanism. Remove the counter belt (64) from the tape counter.

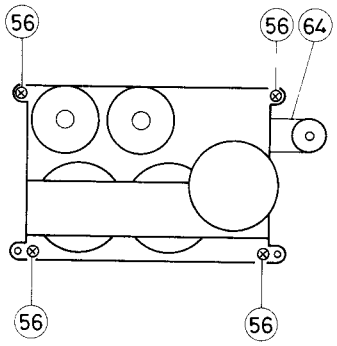


Fig. 5

3. Front Panel
   1) Remove four screws (20) fixing the front panel.
   2) Pull out the balance knob (37) out.
   3) Remove the front panel together with mecha button board and digital peak button board from the front plate.

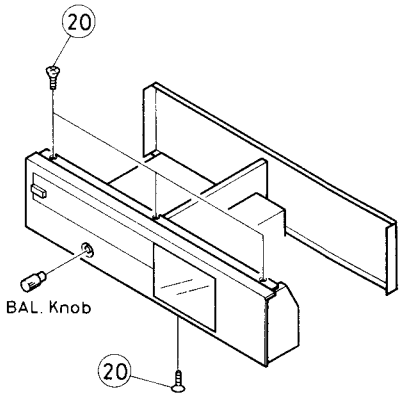


Fig. 6

4. FL Board Ass'y
   1) Remove the front panel.
   2) Remove the FL Board Ass'y by pulling it front side.

5. Rear Panel
   1) Remove the top and bottom covers.
   2) Remove six screws (8), (9), (10) fixing the rear panel.

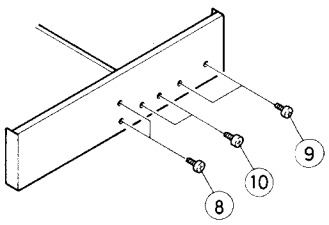


Fig. 7

■ Mechanism Section

1. R/P & E Head Ass'y
   1) Remove two screws (62) from the head mount base.
   2) Remove two screws (67) fastening R/P & E Head Ass'y.

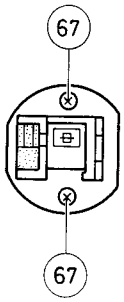


Fig. 8

2. Pinch Roller Ass'y
   1) Pull out the pinch roller (72) and (76) .

3. Take Up Disk (14)
   1) Pull out the reel stopper (17) .

4. Take Up Disk (18)
   1) Pull out the reel stopper (21) .

5 Capstan Motor (36)
   1) Remove two screws (39) fastening FM Bracket.
   2) Pull out the capstan belt (50) and motor pulley.

6. Reel Motor (25)
   1) Remove two screws (29) , (41) .
   2) Pull out the gear (1) and arm.

7. Cam Motor (22)
   1) Remove two screws (24) , (40) .
   2) Pull out the motor gear.

8. Disk Base Ass'y
   1) Disassembly reel and cam motor.
   2) Remove one screw (31) .

■ Mechanism Section

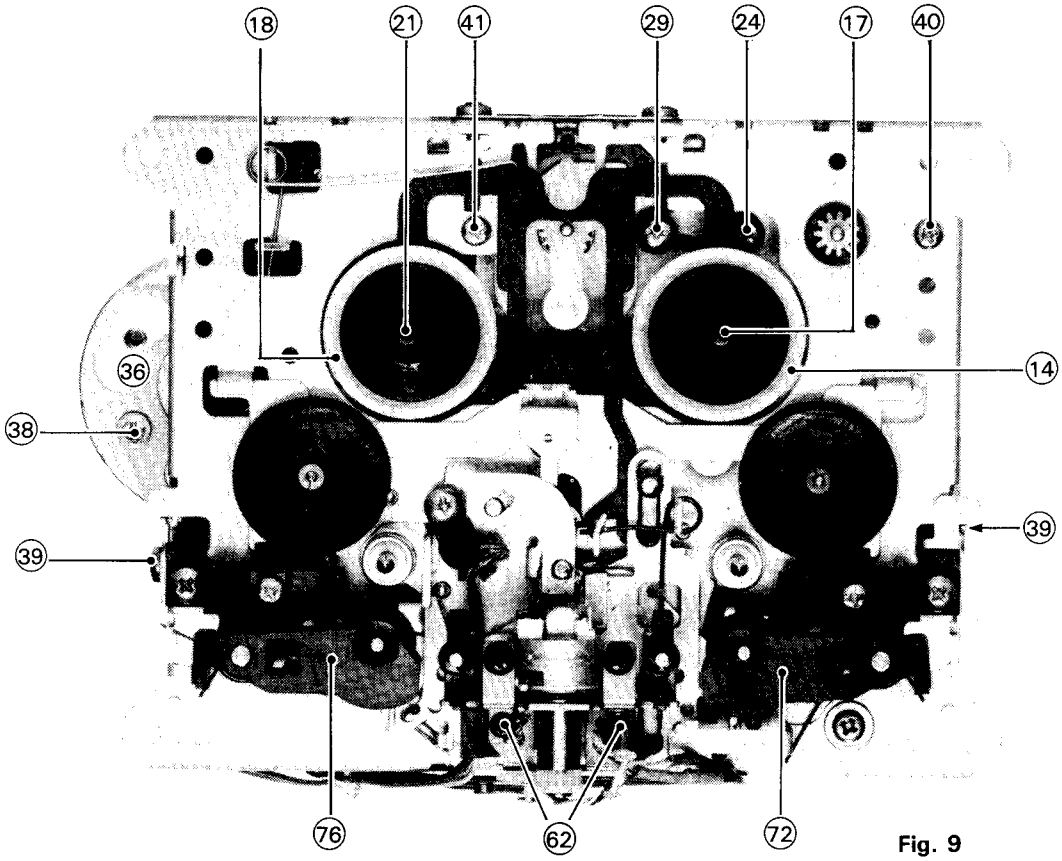


Fig. 9

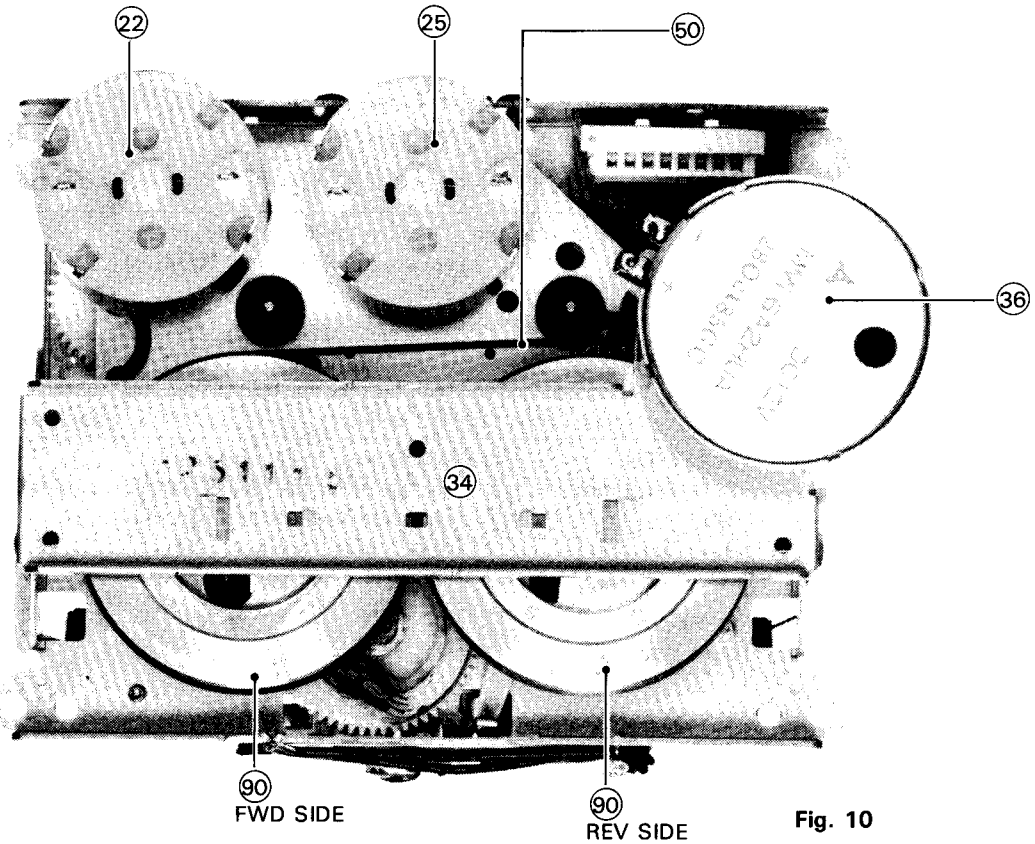
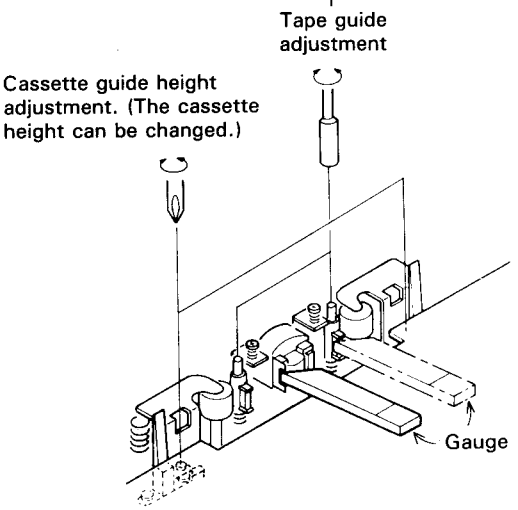
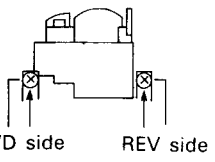


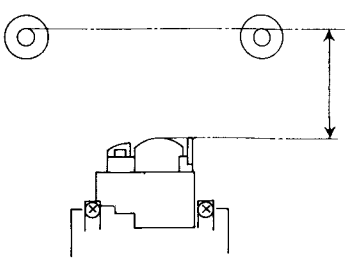
Fig. 10

Main Adjustment

Items	Tape to be used/jig	Standard	Adjustment and checking method	Adjusting points
1. Tape transport adjustment	M300 gauge and C-90 tape	The tape should not be curled or stretched during travel. Note: Normally, the tape travel can only be adjusted at tape guide. However, when this adjustment is not sufficient, adjust the cassette guide height.	Adjust the tape guide and cassette guide heights so that the gauge passes through the guide smoothly. Confirm it in both forward and reverse directions.	Refer to the illustration below. (Apply screw locking compound after adjustment.)
2. Tape speed adjustment and wow and flutter checking	Test tape VTT712 (3 kHz)	Within 3,000 Hz±15 Hz, 0.11% (WRMS)	Perform the tape speed adjustment at the tape end in the FWD side. Check the wow and flutter at the beginning and end of the tape both FWD and REV sides.	Semi-fixed resistor in the capstan motor.
3. Azimuth adjustment (1)	Test tape TMT702 (14 kHz)	Phase deviation should not occur when the output is maximum.	Adjust the FWD side and then the REV side.	FWD side REV side
4. Checking the rewind torque	CTG-N for the torque measurement or torque dial	35 ~ 75 g·cm during the PLAY mode 70 ~ 200 g·cm during the FF/REW mode	These standards should be satisfactory for both FWD/REV sides.	—
5. Pinchroller pressure	Tension gauge	350 ~ 500 g	This standard should be satisfactory for both FWD and REV sides.	Pull it to the vertical direction when the pinch roller rotation stops.
6. Head position	M300 gauge	PLAY/REC: 3.1 ~ 3.65 mm MS: 4.4 ~ 5.1 mm	Check that the standards should be in the specified range on the left and top of all parts do not hit the cassette.	
7. Fast wind time	C-60 cassette	FF/REW: Less than 95 sec.		







Adjustment and Checking

- NR switch: OFF
- TAPE switch: Normally set to NORMAL
- Measuring position: Normally LINE OUT
- Minimum input level (Ref. level) MIC: −66 dBs LINE IN: −20 dBs

Items	Tape to be used	Standards	Adjustment and checking method	Adjusting points
1. Playback level adjustment	VTT724 (1 kHz)	−8 dBs	Adjust in the FWD direction and check in the REV direction. The playback level should be −8 dBs ±1 dB with L and R deviations of 1 dB.	Bus wire cut for L CH B159 .. +1 dB B160 .. −1 dB R CH B157 .. +1 dB B158 .. −1 dB
2. Playback equalizer adjustment	VTT739 (63 Hz, 1 kHz, 10 kHz)	The deviation of 1 kHz/10 kHz should be 0~0.5 dB.	Perform adjustment in the FWD direction.	VR101 201
3. Bias frequency adjustment	—	81 kHz±1 kHz	Set the unit to the FWD mode and measure at pin 9 of CP901 with the tape select switch set to the METAL position. (Dummy resistor should be 1.2 MΩ or more.)	L901
4. Record/play frequency response adjustment	TS-9 (Normal) TS-6 (Chrome) TS-7 (Metal)	Adjust to +0.5 dB ±0.5 dB at the FWD side. Check that it is +0.5 dB ±2 dB. Check that it is +0.5 dB ±2 dB.	Adjust by recording and playing back 1.25 kHz and 12.5 kHz signals with the reference level of −20 dB input. (Adjust the balance control so that the L and R input level differences are 0.)	VR103, 203
5. Recording level adjustment	TS-9 (Normal)	−8 dBs±1 dB	Adjust by recording and playing back the reference level of 1 kHz in the FWD mode. Check that the recording level of chrome tape is −8 dBs ± 1.5 dB. Check that the recording level of metal tape is −8 dBs ±2 dB. The L and R level differences should be 1.5 dB or less.	Bus wire cut for L CH B61 ... +1 dB B62 ... −1 dB R CH B60 ... +1 dB B59 ... −1 dB
6. FL meter adjustment	TS-9 (Normal)	[−20 dB] should light.	Adjust the input level so that 1 kHz LINE OUT signal becomes the reference level of −20 dB (−28 dBs) and [−20 dB] in the FL meter light or the FL meter goes out at −29 dBs. [0 dB] should light between −9 dBs and −8 dBs.	VR301 401
7. Checking the record/play distortion	TS-9 TS-6 TS-7	Normal: Less than 2% Chrome: Less than 3% Metal: Less than 2% (THD)	Measure by recording and playing back the reference level of 1 kHz.	—
8. Checking record/play S/N ratio	TS-9 (Normal)	42 dB or more	Apply the reference level of 1 kHz and non-signal level to the MIC jacks and measure the difference by recording and playing back.	—

Items	Tape to be used	Standards	Adjustment and checking method	Adjusting points
9. Azimuth adjustment (2)	Test tape TMT702 (14 kHz) TS-9 (Normal)	Minimum phase difference and maximum output	Set the unit to the FWD mode and adjust the left screw to the maximum output position with no phase difference. Check the level difference by recording and playing back the reference level of 12.5 kHz, −20 dB. Next, rewind the tape to the original position and turn the tape over to play it in the REV mode. Adjust the right screw so that the level is the same as in the FWD mode. Repeat the PLAY and STOP operations to check it.	Head azimuth adjustment screw
10. Checking REV response	TS-9 (Normal)	+0.5 dB ±3 dB at 1.25 kHz/12.5 kHz	When 1.25 kHz/12.5 kHz signal is recorded and played back in the REV mode, the REV response should be +0.5 dB ± 3 dB and when 1 kHz signal is recorded and played back, the REV response should be within ±1.5 dB with respect to the FWD mode.	—
11. Checking the auto stop	Cassette tape (general)	Auto stop should be performed within 5 sec.	Check at the tape's end in PLAY, FF/REW modes when the reverse mode is set to " ⇄ ". (The clearance between the Hall IC and magnet should be 1 ± 0.5 mm.)	—
12. Checking the music scan operation	Test tape TMT6447 (700 Hz) TMM6448 (700 Hz)	—	Check that the unit enters the playback mode after music scan when TMT6447 reaches its near end. Check that the music scan operation is not performed when the beginning of TMT6448 is used.	—
13. Checking the MPX filter response	—	30 dB or more	Measure the LINE OUT output when inputting a 19 kHz signal with the required level and the NR switch set to ON or OFF.	—
14. Checking DOLBY NR response at Encode (REC)	DOLBY B NR	Test point Pin ⑦ ㊱ of IC902 Measuring reference level 400 Hz, −6 dBs (=Cal level)	Frequency and input level / Output value and deviation 1 kHz Cal −40 dB: +5.7 dB ±2 dB 5 kHz Cal −20 dB: +3.5 dB ±1.5 dB 1 kHz Cal: 0 dB +0.5 −1.0 dB	Make connections after first removing soldering for the BIAS CUT, stopping oscillation and making measurements.
	DOLBY C NR		1 kHz Cal −40 dB: +16.2 dB +3.0 −2.0 dB 5 kHz Cal −20 dB: +2.9 dB ±2.5 dB 1 kHz Cal: 0 dB ± 1 dB	

■ Equipment and Measuring Instruments used for Adjustment

1. Electrical adjustment

1) Electronic voltmeter
2) Audio frequency oscillator
   (range: 50 Hz—20 kHz and output 0 dB with impedance 600 Ω)
3) Attenuator

2. Mechanical adjustment

Torque testing cassette gauge

Notes: TS-9 is used for recording/playback with normal tape with TD-X501.
TS-9 is not compatible with TS-5.

■ Location of Adjustment Parts

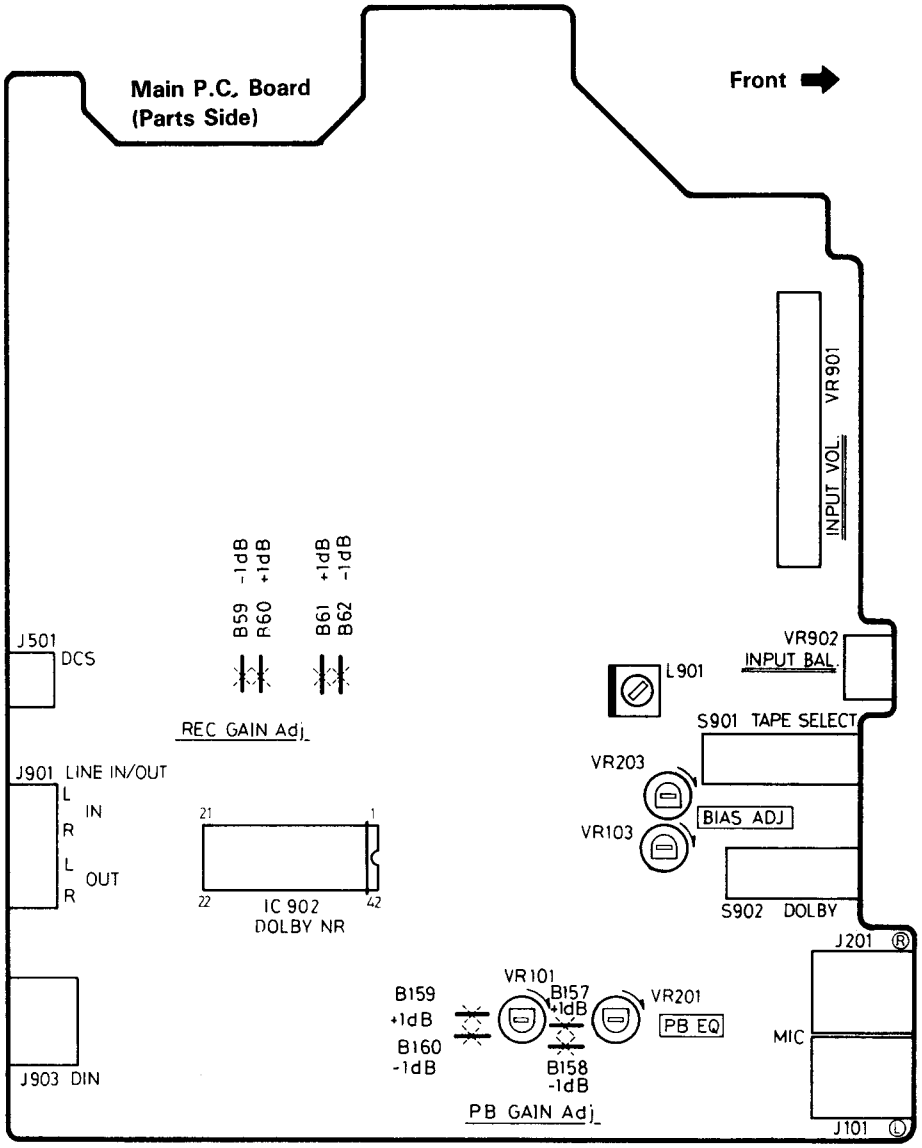


Fig. 11

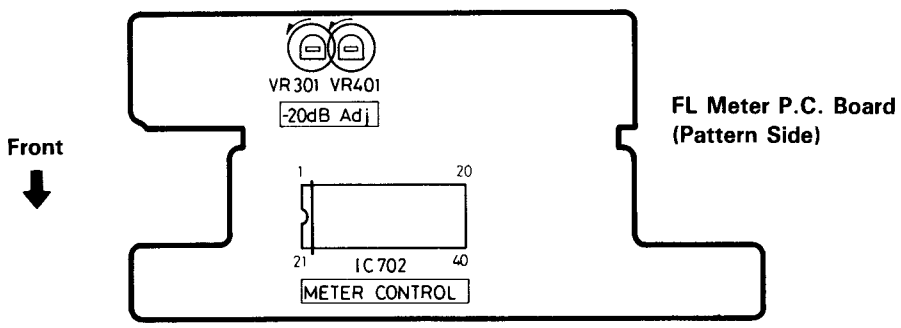


Fig. 12

IC Function Explanation

■ Meter Section

Digital peak block diagram

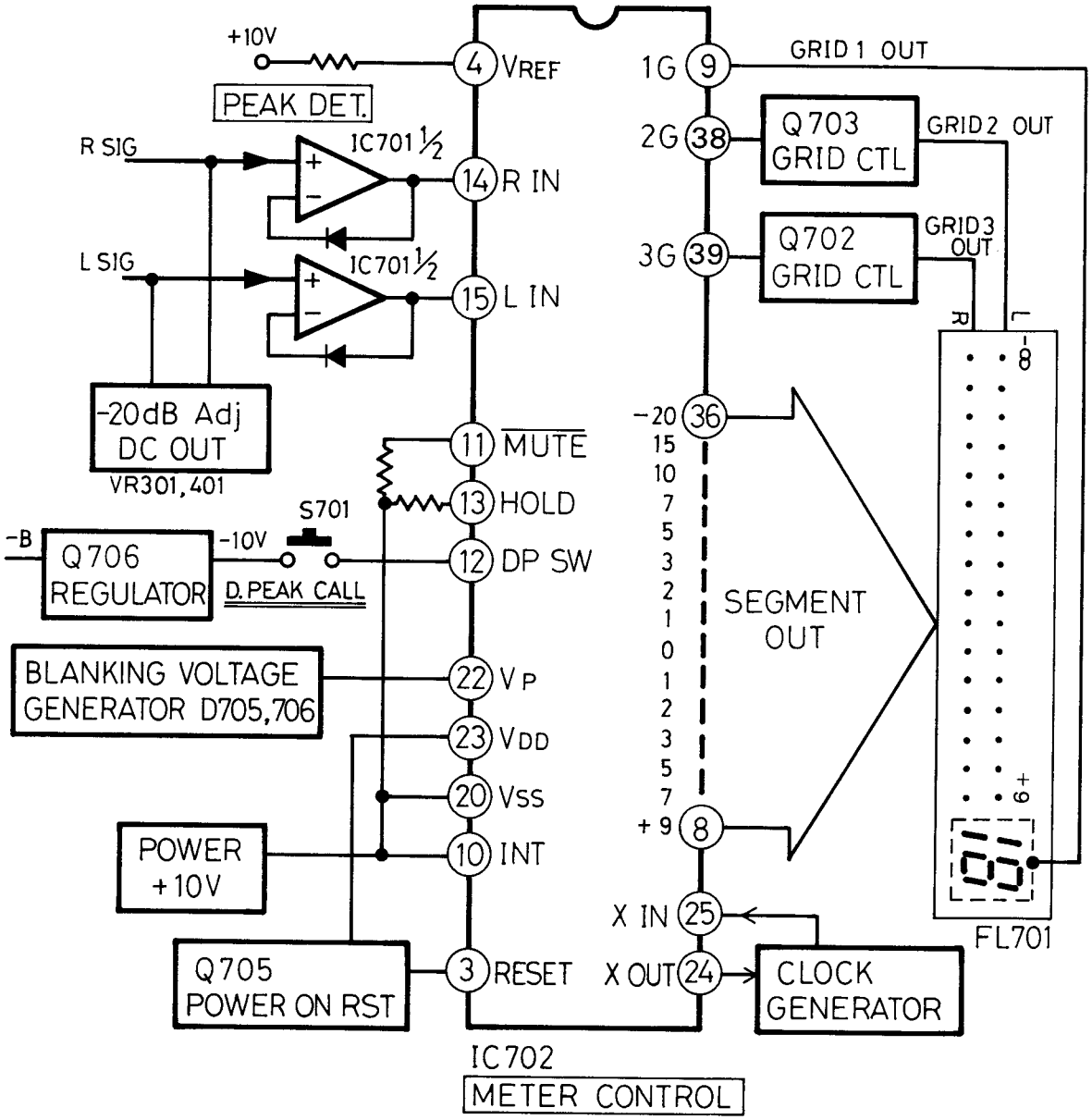


Fig. 13

Digital peak CPU pin function chart

Pin No.	Pin Name	Function
1	NC	Not used.
2	NC	Not used.
3	RST	Power ON Reset input. RESET at "H" level. START at "L" level.
4	VREF	Reference voltage input pin.
5	+3	+3 segment output. Lights at "H" level.
6	+5	+5 segment output. Lights at "H" level.
7	+7	+7 segment output. Lights at "H" level.
8	+9	+9 segment output. Lights at "H" level.
9	1G	DIGITAL PEAK section grid select output. Lights at "H" level.
10	INT	Interrupt input pin. Pulled UP at "H" level because not used.
11	$\overline{\text{MUTE}}$	DISPLAY MUTE Input pin. Display at "H" level. Blank at "H" level.
12	DPSW	DIGITAL PEAK CALL SW input pin. MAX VALUE CALL at "L" level input. Displays the PEAK reset when "L" is input again during the MAX VALUE display.
13	HOLD	PEAK HOLD ON/OFF input. HOLD OFF at "H' level. HOLD ON at "L" level.
14	R IN	R CH Peak rectified voltage input pin. Displays by comparating between the A/D converted analog voltage at this pin and reference voltage.
15	L IN	L CH Peak rectified voltage input pin. Displays by comparating between the A/D converted analog voltage at this pin and reference voltage.
16	NC	Not used.
17	NC	Not used.
18	CN Vss	} +10 V connection pin.
19	CN Vss	
20	Vss	
21	NC	Not used.
22	VP	Segment OFF voltage input pin. (Pulled down "L" level for segment output.)
23	V_{DD}	+20 V (reference) −10 V (equivalent to GND of IC.)
24	X OUT	Clock connection pin.
25	X IN	Clock input pin.
26	−1	−1 & h segment output Lights at "H" level.
27	−2	−2 & g segment output. Lights at "B" level.
28	−3	−3 & f segment output. Lights at "H" level.
29	−5	−5 & e segment output. Lights at "H" level.
30	0	0 & under segment output. Lights at "H" level.
31	+1	+1 & over segment output. Lights at "H" level.
32	+2	+2 segment output. Lights at "H" level.
33	−7	−7 & d segment output. Lights at "H" level.
34	−10	−10 & c segment output. Lights at "H" level.
35	−15	−15 & b segment output Lights at "H" level.
36	−20	−20 & a segment output. Lights at "H" level.
37	NC	Not used.
38	2G	Grid select output for the L CH and each display letter. Lights at "H" level.
39	3G	R CH grid select output. Lights at "H" level.
40	NC	Not used.

■ Mechacon Section

Mechacon block diagram

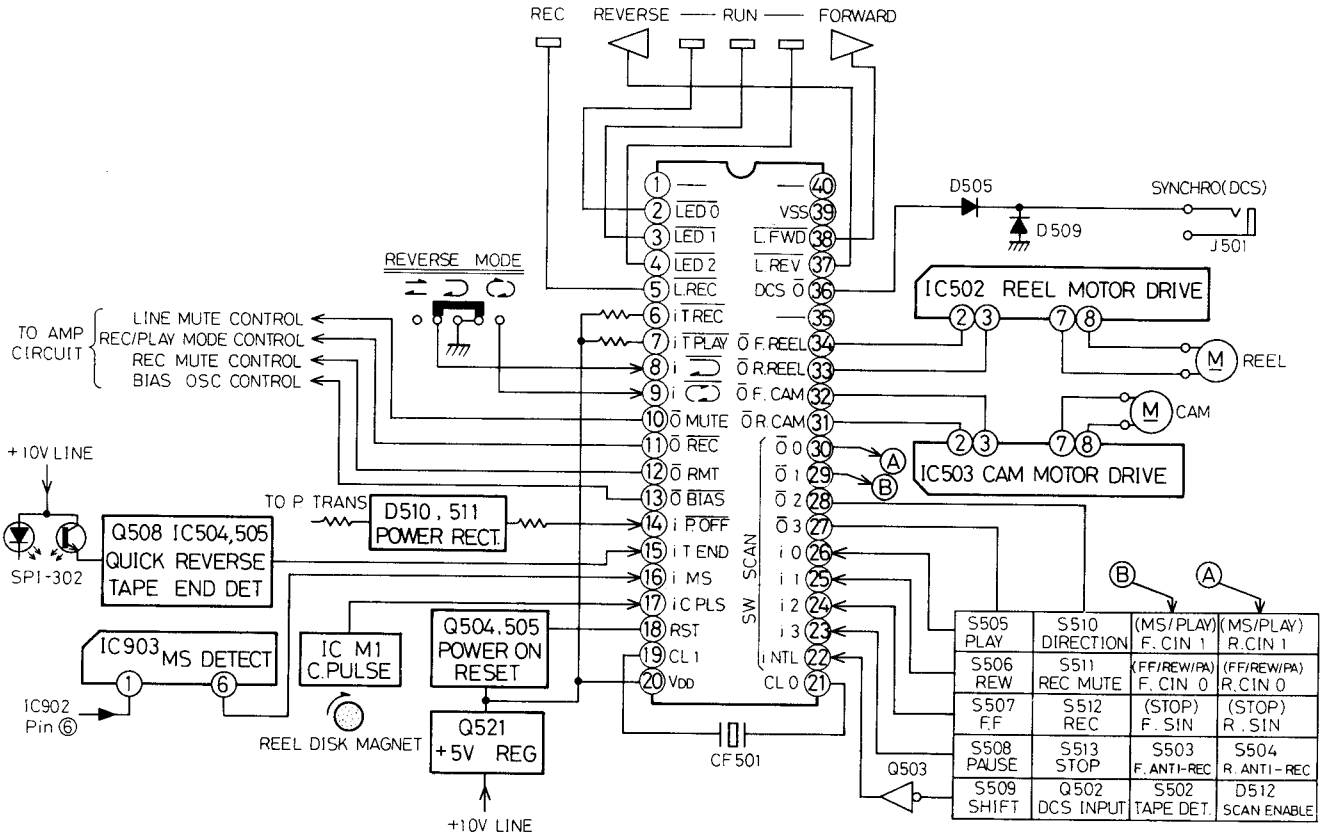


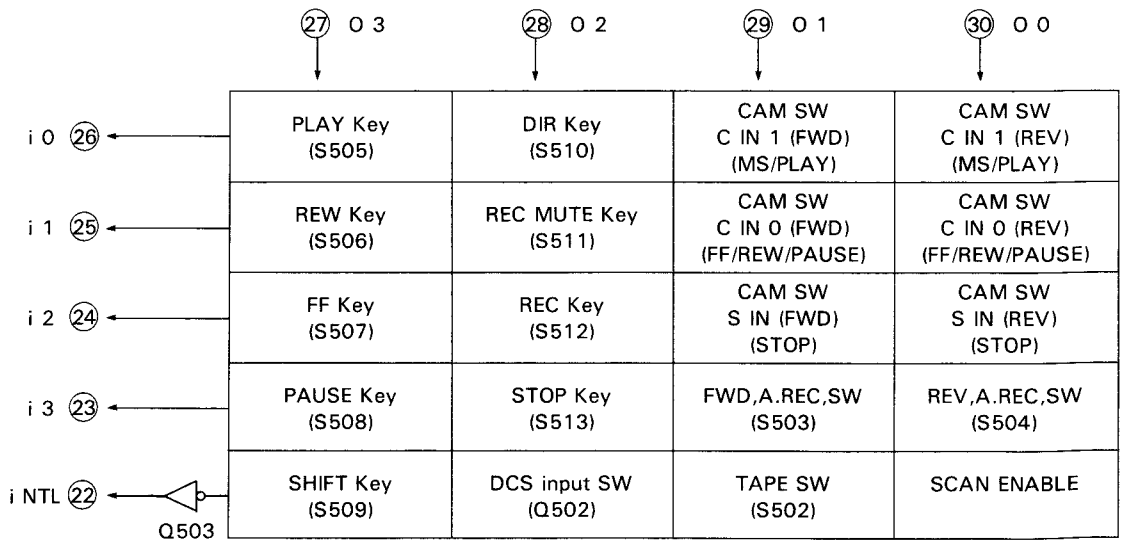
Fig. 14

Mechacontrol CPU pin function chart

Pin No.	Port Name	Input/ Output	Function
1	—	—	Not used. (open)
2	$\overline{\text{LED 0}}$	out	Tape running display ($\overline{\text{LED 1}}$ lights when paused.) L: Lights H: Lights out
3	$\overline{\text{LED 1}}$	out	
4	$\overline{\text{LED 2}}$	out	
5	$\overline{\text{L. REC}}$	out	REC MODE display (Blinks when REC MUTE) L: Lights H: Lights out
6	i.$\overline{\text{T. REC}}$	in	Timer REC setting input L:Timer REC operation setting H: No setting } Not used
7	i.$\overline{\text{T. PLAY}}$	in	Timer PLAY setting input L: Timer PLAY operation setting H: No setting } Not used
8	i $\overline{\supset}$	in	Reverse mode (⊃ mode) setting input L: Setting H: No setting
9	i $\overline{\circlearrowleft}$	in	Repeat mode (↺ mode) setting input L: Setting H: No setting
10	O MUTE	out	LINE OUT signal Muting control output H: MUTE ON L: MUTE OFF

Pin No.	Port Name	Input/ Output	Function		
11	O $\overline{\text{REC}}$	out	Amplifier circuit record/playback control output	L: REC	H: P.B mode
12	O RMT	out	Recording signal muting control output	H: MUTE ON	L: MUTE OFF
13	O $\overline{\text{Bias}}$	out	Bias oscillation circuit control output	L: Bias oscillation	H: Bias oscillation stop
14	i $\overline{\text{P.OFF}}$	in	Power OFF detection signal input	L: Power OFF	H: Power ON
15	i T.END	in	Quick reverse detection signal (TAPE END signal) input	H: TAPE END	L: ———
16	i MS	in	Tune detection signal input	H: Tune exists	L: No tune
17	i C.PLS	in	Counter (right reel spin) pulse input		
18	RST	in	Microcomputer reset signal input	H: Reset	L: Operable
19	CL 1	——	Part connection terminal for clock oscillation		
20	VDD	——	Positive (+) terminal of power source		
21	CL 0	——	Part connection terminal for clock oscillation		
22	i NTL	in	Key and all SW signals, DCS signal input port (Signals are received through dynamic scan with 27 to 30 terminal)		
23	i 3	in			
24	i 2	in			
25	i 1	in			
26	i 0	in			
27	O 3	out	Select signal output for dynamic scan (L: Select)		
28	O 2	out			
29	O 1	out			
30	O 0	out			
31	O R. CAM	out	Cam motor control output		
32	O F. CAM	out			
33	O R. REEL	out	Reel motor control output		
34	O F. REEL	out			
35	——	——	Not used		
36	DCS O	out	DCS remote signal output terminal		
37	$\overline{\text{L. REV}}$	out	Reverse LED display output	L: Lights	H: Lights out
38	$\overline{\text{L. FWD}}$	out	Forward LED display output	L: Lights	H: Lights out
39	Vss	——	Negative (−) terminal of power source, connected to GND		
40	——	——	Not used (Ground)		

Distribution diagram of dynamic scan



Block Diagram

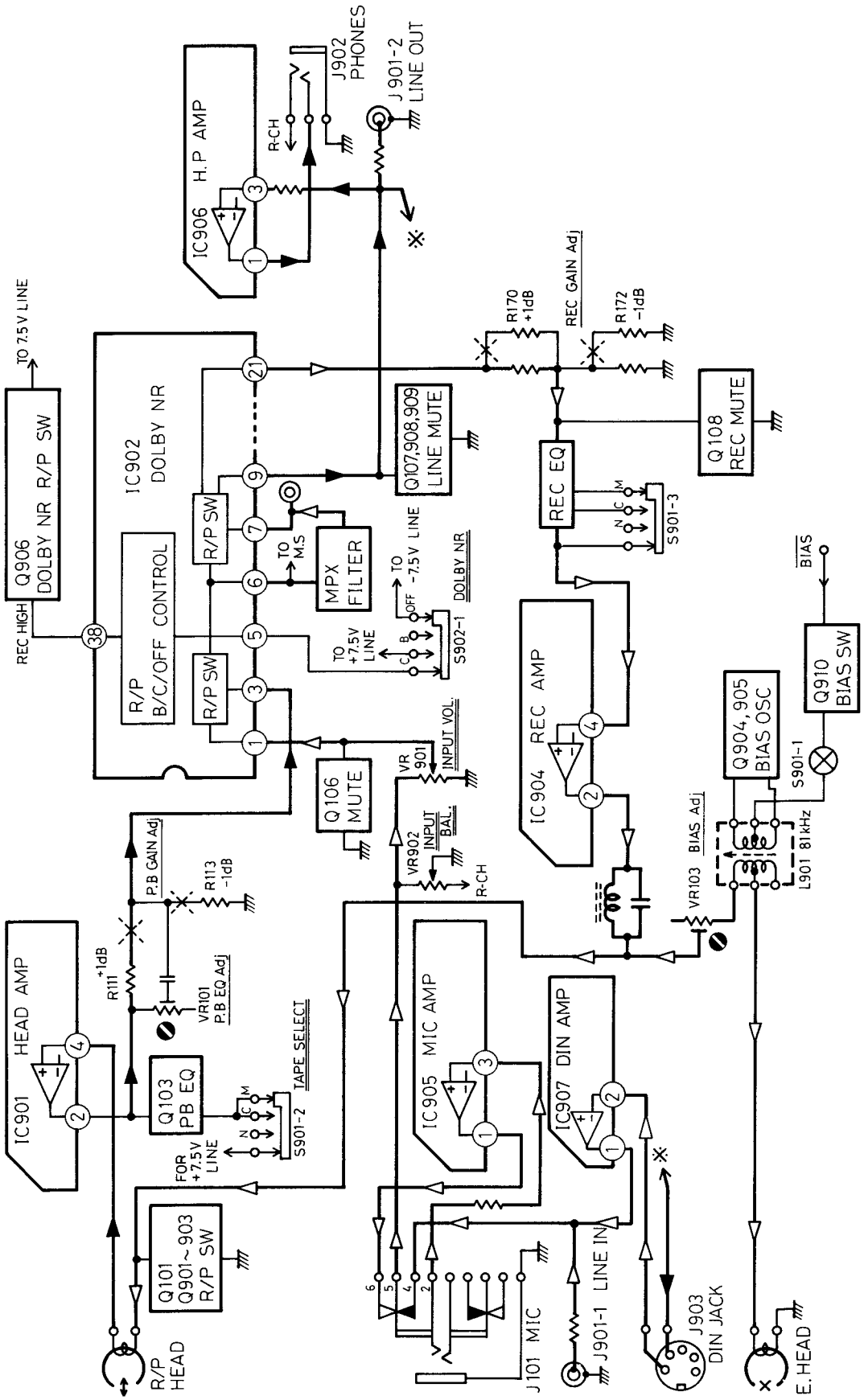
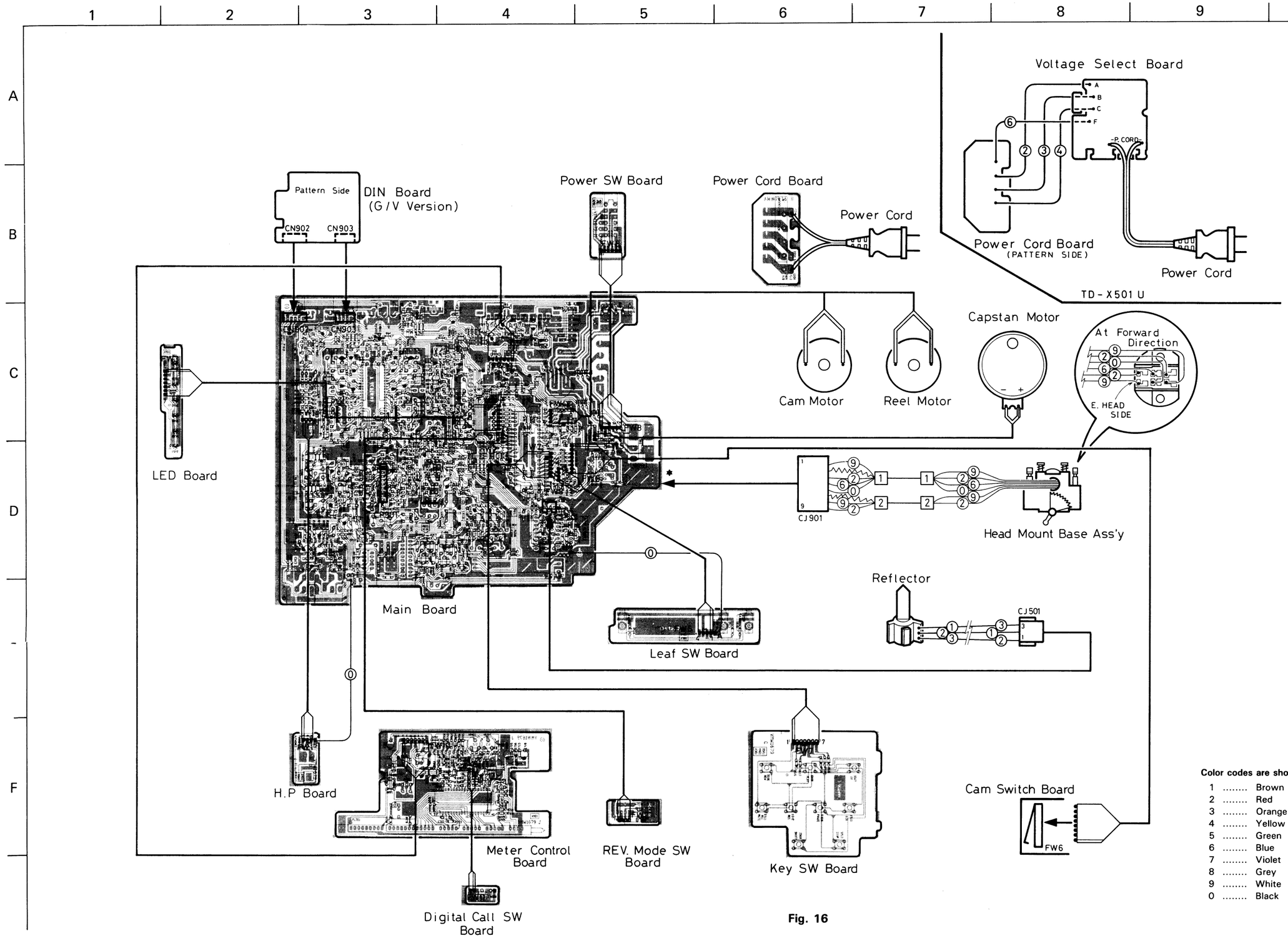


Fig. 15

Wiring Connection

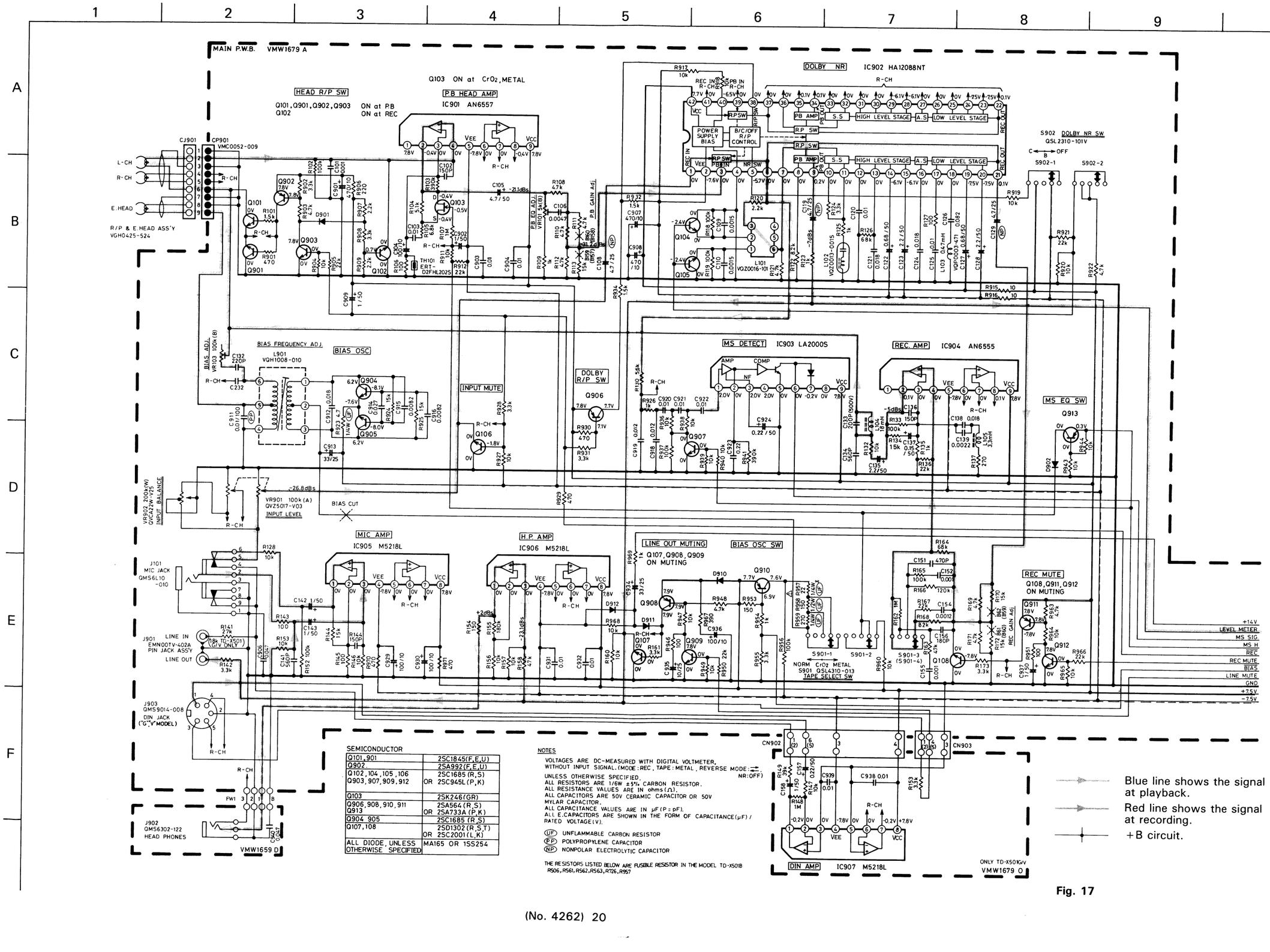


Color codes are shown below

1	.....	Brown
2	.....	Red
3	.....	Orange
4	.....	Yellow
5	.....	Green
6	.....	Blue
7	.....	Violet
8	.....	Grey
9	.....	White
0	.....	Black

Fig. 16

Standard Schematic Diagram of TD-X501 (Amplifier Circuit)



SEMICONDUCTOR	
Q101,901	2SC1845(F,E,U)
Q902	2SA992(F,E,U)
Q102,104,105,106 Q903,907,909,912	2SC1685(R,S) OR 2SC945L(P,K)
Q103	2SK246(GR)
Q906,908,910,911 Q913	2SA564(R,S) OR 2SA733A(P,K)
Q904 905	2SC1685(R,S)
Q107,108	2SD1302(R,S,T) OR 2SC2001(L,K)
ALL DIODE, UNLESS OTHERWISE SPECIFIED	MA165 OR 1SS254

NOTES

VOLTAGES ARE DC-MEASURED WITH DIGITAL VOLTMETER, WITHOUT INPUT SIGNAL. (MODE: REC, TAPE: METAL, REVERSE MODE: ++ NR:OFF)

UNLESS SPECIFIED.
ALL RESISTORS ARE 1/6W ±5%, CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN ohms (Ω).
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN μF (P = pF).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF) / RATED VOLTAGE(V).

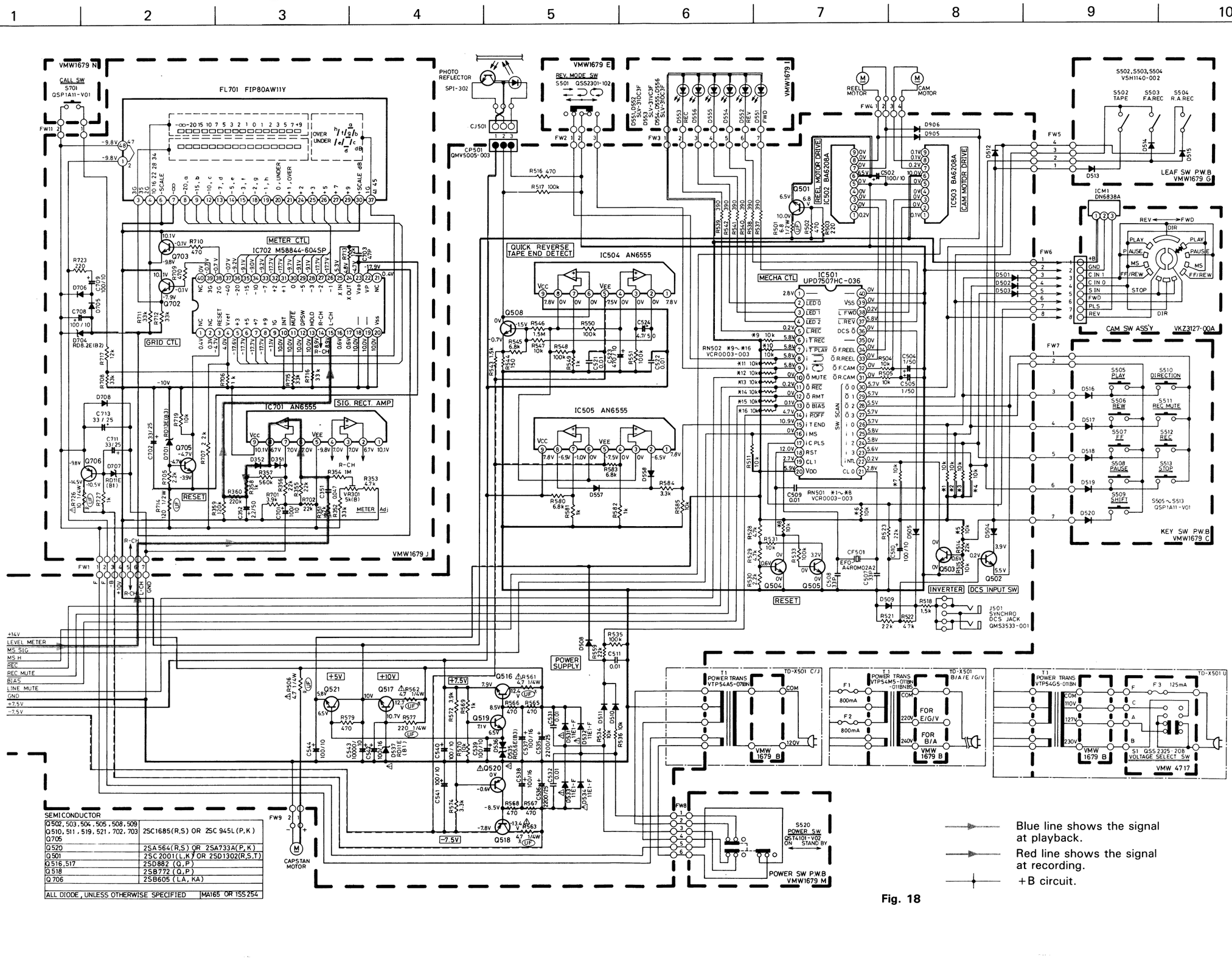
(UF) UNFLAMMABLE CARBON RESISTOR
(PP) POLYPROPYLENE CAPACITOR
(NP) NONPOLAR ELECTROLYTIC CAPACITOR

THE RESISTORS LISTED BELOW ARE FUSIBLE RESISTOR IN THE MODEL TD-X501B
R506, R561, R562, R563, R726, R957

Blue line shows the signal at playback.
Red line shows the signal at recording.
+B circuit.

Fig. 17

Standard Schematic Diagram of KD-TD501 (Mecha Control Circuit)



SEMICONDUCTOR	
Q502, 503, 504, 505, 508, 509 Q510, 511, 519, 521, 702, 703 Q705	2SC1685(R,S) OR 2SC945L(P,K)
Q520	2SA564(R,S) OR 2SA733A(P,K)
Q501	2SC2001(L,K) OR 2SD1302(R,S,T)
Q516, 517	2SD882 (Q,P)
Q518	2SB772 (Q,P)
Q706	2SB605 (LA, KA)
ALL DIODE, UNLESS OTHERWISE SPECIFIED	MA165 OR 1SS254

Fig. 18

P.C. Board Parts and Parts List

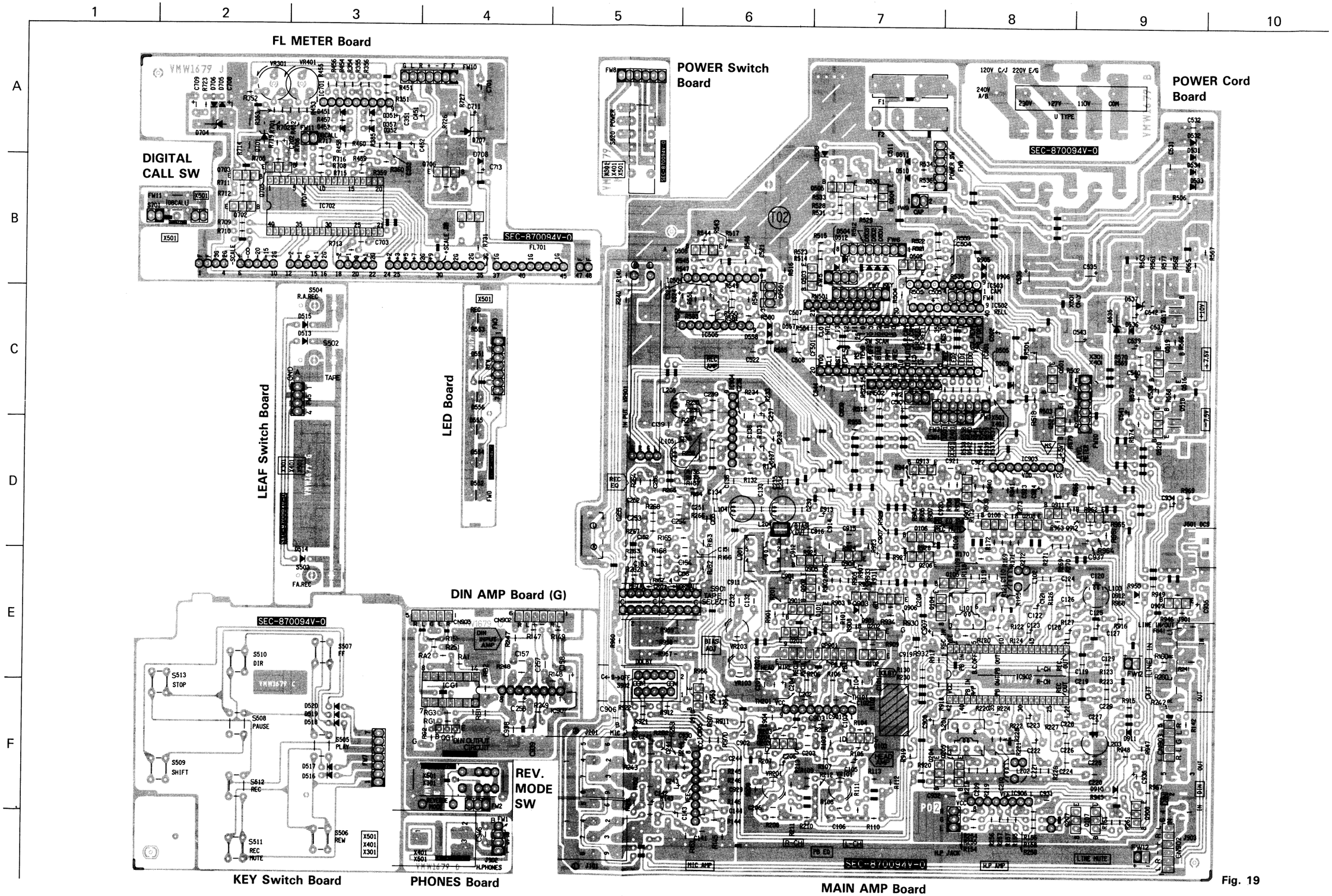


Fig. 19

P.C. Board Parts List (1)

⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	REF. NO	PARTS NO.	PARTS NAME	REMARKS	QTY
	IC504,IC505	AN6555	I.C. (M)		4
	IC701,IC904				
	IC901	AN6557	I.C.		1
	IC502,IC503	BA6208A	I.C		2
	IC902	HA12088NT	DOLBY IC		1
	IC903	LA2000S	I.C		1
	IC905-IC907	M5218L	I.C		3
	IC702	M58844-604SP	I.C.		1
	IC501	UPD7507HC-036	I.C. (M)		1
	Q520 ,Q906	2SA564(R,S)	TRANSISTOR		6
	Q908 ,Q910				
	Q911 ,Q913				
	Q902	2SA992(E,U)	TRANSISTOR		1
	Q706	2SB605(LA,KA)	TRANSISTOR		1
⚠	Q518	2SB772(Q,P)	SI.TRANSISTOR		1
⚠	Q102 ,Q104	2SC1685(R,S)	TRANSISTOR		24
	Q105 ,Q106				
	Q202 ,Q204				
	Q205 ,Q206				
	Q502 -Q505				
	Q508 ,Q519				
	Q521 ,Q702				
	Q703 ,Q705				
	Q903 -Q905				
	Q907 ,Q909				
	Q912				
	Q101 ,Q201	2SC1845(E,U)	TRANSISTOR		3
	Q901				
	Q107 ,Q108	2SC2001(L,K)	TRANSISTOR		5
	Q207 ,Q208				
	Q501				
⚠	Q516 ,Q517	2SD882(Q,P)	SI.TRANSISTOR		2
	Q103 ,Q203	2SK246(GR)E2	FET		2
⚠	D537	RD11E(B1)	Z DIODE		1
⚠	D535	RD5.6E(B3)	Z.DIODE		1
⚠	D551 ,D552	SLV-31DC3F	L.E.D.		5
	D554 -D556				
⚠	D553	SLV-31VC3F	L.E.D.		1
⚠	D351 ,D352	1SS254	SI.DIODE		35
	D451 ,D452	OR MA165			
	D501 -D505				
	D508 -D520				
	D536 ,D557				
	D558 ,D705				
	D706 ,D708				
	D901 ,D902				
	D905 ,D906				
	D910 -D912				
⚠	D531 -D534	11E1-TB2	SI DIODE		4
	VR902	QVCA22W-V25	V.RESISTOR		1
	VR101,VR201	QVPA601-502	V.RESISTOR		4
	VR301,VR401				
	VR103,VR203	QVP4A0B-104	V.RESISTOR		2
	VR901	QVZ5017-V03	V.RESISTOR		1

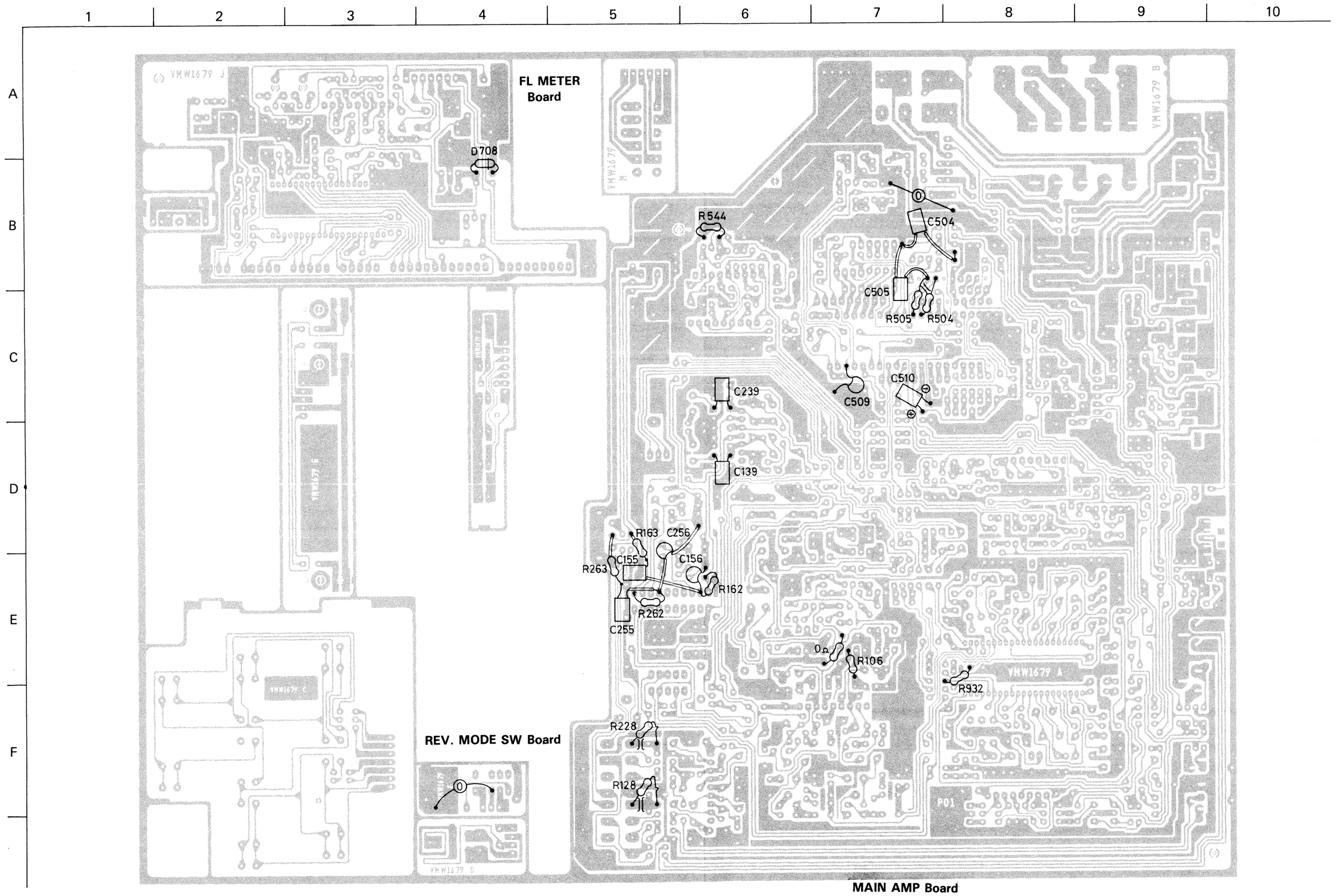
⚠	REF. NO	PARTS NO.	PARTS NAME	REMARKS	QTY
	CN903	QMV5004-005	CONNECTOR		1
	CN902	QMV5004-006	CONNECTOR		1
	S902	QSL2310-101V	LEVER SWITCH		1
	S901	QSL4310-013	LEVER SWITCH		1
	S505 -S513,	QSP1A11-V01	PUSH SWITCH		10
	S701	QSP1A11-V01	TACT SW		1
	S501	QSS2301-102	SLIDE SWITCH		1
⚠	S520	QST4101-V02	PUSH SWITCH		1
	L901	VQH1008-010	OSC COIL		1
	L104 ,L204	VQP0001-183S	INDUCTOR		2
	L105 ,L205	VQP0001-332S	INDUCTOR		2
	L103 ,L203	VQP0003-471	INDUCTOR		2
	L102 ,L202	VQZ0013-001S	FILTER		2
	L101 ,L201	VQZ0016-101	FILTER		2
⚠	R714	QRD129J-121	C RESISTOR		1
⚠	R958	QRD129J-151	C RESISTOR		1
⚠	R501	QRD129J-6R8	CORBON RESISTOR		1
	R505	QRD144J-103S	CARBON RESISTOR		1
⚠	R726	QRD149J-100S	CARBON RESISTOR	TD-X501 A/C/E/G/J/U	1
⚠	R957	QRD149J-220S	CARBON RESISTOR	〃	1
⚠	R577	QRD149J-221S	CARBON RESISTOR		1
⚠	R959	QRD149J-271S	CARBON RESISTOR		1
⚠	R506 ,R561	QRD149J-4R7S	C RESISTOR	TD-X501 A/C/E/G/J/U	4
	R562 ,R563				
	R923	QRD149J-4R7S			
	R915 ,R916	QRD161J-100	CARBON RESISTOR		2
	R106 ,R127	QRD161J-101	CARBON RESISTOR		10
	R143 ,R145				
	R206 ,R227				
	R243 ,R245				
	R946 ,R951				
	R109 ,R123	QRD161J-102	CARBON RESISTOR		19
	R125 ,R135				
	R209 ,R223				
	R225 ,R235				
	R358 ,R458				
	R549 ,R569				
	R581 ,R582				
	R706 ,R727				
	R926 ,R954				
	R969				
	R128 ,R132	QRD161J-103	CARBON RESISTOR		55
	R146 ,R147				
	R153 ,R156				
	R157 ,R160				
	R228 ,R232				
	R246 ,R247				
	R253 ,R256				
	R257 ,R260				
	R504 ,R511				
	R515 ,R531				
	R534 ,R536				
	R547 ,R570				
	R585 ,R719				
	R904 ,R911				

P.C. Board Parts List (2)

⚠	REF. NO	PARTS NO.	PARTS NAME	REMARKS	QTY
	R917 -R920 R927 ,R936 R938 -R940 R943 ,R944 R947 ,R949	QRD161J-103	C. RESISTOR		
	R960 ,R964 R965 ,R968 R102 ,R118 R119 ,R133 R152 ,R165	QRD161J-104	CARBON RESISTOR		20
	R202 ,R218 R219 ,R233 R252 ,R265 R517 ,R533 R535 ,R548				
	R550 ,R551 R937 ,R956 R107 ,R148 R162 ,R207 R248 ,R262	QRD161J-105	CARBON RESISTOR		8
	R354 ,R454 R713 ,R717 R166 ,R266 R359 ,R459 R154 ,R254	QRD161J-123 QRD161J-124 QRD161J-151	CARBON RESISTOR CARBON RESISTOR CARBON RESISTOR		2 4 5
	R503 ,R544 R953 R101 ,R201 R518 ,R543 R932 ,R934	QRD161J-152	CARBON RESISTOR		6
	R113 ,R134 R144 ,R170 R172 ,R213 R234 ,R244 R270 ,R272	QRD161J-153	CARBON RESISTOR		12
	R924 ,R925 R931 R546 R141 R241	QRD161J-155 QRD161J-183	C RESISTOR CARBON RESISTOR		1 2
	R155 ,R167 R255 ,R267 R723 ,R906 R120 ,R220 R530 ,R705	QRD161J-184 QRD161J-221 QRD161J-222	CARBON RESISTOR CARBON RESISTOR CARBON RESISTOR		4 2 7
	R707 ,R907 R909 R136 ,R236 R355 ,R356 R455 ,R456	QRD161J-223	CARBON RESISTOR		16
	R514 ,R521 R523 ,R559 R702 ,R905 R912 ,R921 R950 ,R966				

⚠	REF. NO	PARTS NO.	PARTS NAME	REMARKS	QTY
	R360 ,R460 R137 ,R237 R141 ,R241 R124 ,R142 R151 ,R161	QRD161J-224 QRD161J-271 QRD161J-273 QRD161J-332	CARBON RESISTOR CARBON RESISTOR CARBON RESISTOR CARBON RESISTOR		2 2 2 17
	R173 ,R224 R242 ,R251 R261 ,R273 R574 ,R584 R902 ,R908				
	R928 ,R931 R955 R352 ,R452 R708 ,R711 R712 ,R715	QRD161J-333	CARBON RESISTOR		7
⚠	R716 R537 -R542 R967	QRD161J-391	CARBON RESISTOR		7
	R572 ,R701 R149 ,R249	QRD161J-392 QRD161J-393	CARBON RESISTOR CARBON RESISTOR		2 2
	R103 ,R203 R941 R502 ,R516 R565 -R568 R579 ,R709	QRD161J-394 QRD161J-471	C RESISTOR CARBON RESISTOR		3 14
	R710 ,R901 R929 ,R930 R970 ,R971 R108 ,R110 R111 ,R112	QRD161J-472	CARBON RESISTOR		22
	R121 ,R169 R171 ,R208 R210 -R212 R221 ,R269 R271 ,R353				
	R453 ,R528 R529 ,R903 R922 ,R948 R963 R158 ,R163	QRD161J-473	CARBON RESISTOR		7
	R258 ,R263 R351 ,R451 R522 R104 ,R204 R130 ,R230	QRD161J-512 QRD161J-562	CARBON RESISTOR CARBON RESISTOR		2 2
	R357 ,R457 R105 ,R205 R545 ,R580 R583	QRD161J-564 QRD161J-682	CARBON RESISTOR CARBON RESISTOR		2 5
	R126 ,R164 R226 ,R264 R122 ,R222 R168 R268	QRD161J-683 QRD161J-822 QRD161J-823	CARBON RESISTOR CARBON RESISTOR CARBON RESISTOR		4 2 2

P.C. Board Parts (TD-X501 E # 1 ~ # 1,000 ..... Pattern Side)



P.C. Board Parts List (3)

⚠	REF. NO	PARTS NO.	PARTS NAME	REMARKS	QTY
⚠	R726	QRZ0052-100	F RESISTOR	TD-X501 B	1
⚠	R957	QRZ0052-220	F RESISTOR	〃	1
⚠	R506 ,R561	QRZ0052-4R7	F.RESISTOR	〃	4
	R562 ,R563				
	RN501,RN502	VCR0003-003	C.R.BLOCK		2
	CF501	EFO-A4R0M02A2	CERA LOCK		1
	C509 ,C511	QCF11HP-103	C CAPACITOR		12
	C521 ,C522				
	C531 ,C532				
	C903 ,C904				
	C931 ,C932				
	C938 ,C939				
	C351 ,C451	QCF11HP-473	C.CAPACITOR		4
	C906 ,C940				
	C102 ,C136	QCS11HJ-151	C.CAPACITOR		6
	C144 ,C202				
	C236 ,C244				
	C156 ,C256	QCS11HJ-181	C.CAPACITOR		2
	C132 ,C232	QCS11HJ-221	C.CAPACITOR		2
	C507 ,C508	QCS11HJ-330	C.CAPACITOR		2
	C703	QCS11HJ-470	C.CAPACITOR		1
	C151 ,C251	QCS11HJ-471	C.CAPACITOR		2
	C134 ,C141	QCS11HJ-561	C.CAPACITOR		4
	C234 ,C241				
	C133 ,C233	QCS12HJ-201V	C.CAPACITOR		2
	C108 ,C119	QEN41EM-475	NP.E.CAPACITOR		6
	C129 ,C208				
	C219 ,C229				
	C523 ,C901	QETC1AM-477ZM	E.CAPACITOR		4
	C907 ,C908				
	C104 ,C204	QET41AR-107	E.CAPACITOR		14
	C502 ,C510				
	C539 -C541				
	C544 ,C701				
	C708 ,C709				
	C929 ,C930				
	C936				
	C537 ,C538	QET41CR-107	E CAPACITOR		3
	C542				
	C935	QET41ER-106	E.CAPACITOR		1
	C535 ,C536	QET41ER-228	E.CAPACITOR		2
	C702 ,C711	QET41ER-336	E CAPACITOR		5
	C713 ,C913				
	C934				
	C142 ,C143	QET41HR-105	E.CAPACITOR		11
	C158 ,C242				
	C243 ,C258				
	C504 ,C505				
	C902 ,C909				
	C937				
	C137 ,C237	QET41HR-154	E CAPACITOR		2
	C157 ,C257	QET41HR-224	E.CAPACITOR		3
	C924				
	C105 ,C205	QET41HR-475	E.CAPACITOR		3
	C524				

⚠	REF. NO	PARTS NO.	PARTS NAME	REMARKS	QTY
	C543	QET51AR-109N	E.CAPACITOR		1
	C122 ,C127	QET51HR-684N	E CAPACITOR		4
	C222 ,C227				
	C123 ,C128	QET61HR-225ZM	E.CAPACITOR		8
	C135 ,C223				
	C228 ,C235				
	C352 ,C452				
	C101 ,C152	QFN41HJ-102	M.CAPACITOR		6
	C155 ,C201				
	C252 ,C255				
	C154 ,C254	QFN41HJ-122	M.CAPACITOR		2
	C109 ,C110	QFN41HJ-152	M.CAPACITOR		4
	C209 ,C210				
	C139 ,C239	QFN41HJ-222	M.CAPACITOR		2
	C106 ,C206	QFN41HJ-472	M.CAPACITOR		2
	C915 ,C916	QFN41HJ-822	M CAPACITOR		2
	C911	QFP82AJ-103	P.P.CAPACITOR		1
	C103 ,C120	QFV41HJ-103	TF.CAPACITOR		9
	C125 ,C203				
	C220 ,C225				
	C920 -C922				
	C121 ,C124	QFV41HJ-183	TF.CAPACITOR		7
	C138 ,C221				
	C224 ,C238				
	C912				
	C923	QFV41HJ-224	TF.CAPACITOR		1
	C126 ,C226	QFV41HJ-823	TF CAPACITOR		2
	C918 ,C919	QFV71HJ-123ZM	T.F.CAPACITOR		2
	C914	QFV71HJ-273ZM	TF.CAPACITOR		1
	CP501	QMV5005-003	CONNECTOR		1
	CP901	VMC0052-009	CONNECTOR		1
	J901	EMN00TV-402A	PIN JACK		1
	J903 ,J202	QMC9014-008	DIN SOCKET	TD-X501 G	1
	J501	QMS3533-001	JACK		1
	J101	QMS6L10-010	MIC JACK		2
	J902	QMS6302-122	JACK		1
	FL701	FIP80AW11Y	FL TUBE		1
	TH101,TH201	ERT-D2FHL202S	THERMISTOR		2
⚠	S1	QSS2325-208	SLIDE SWITCH		1
	D701	RD13E (B3)	Z. DIODE		1
	D702	RD8.2E (B2)	〃		1
	D703	RD11E (B1)	〃		1

Exploded View of Enclosure Assembly and Parts List

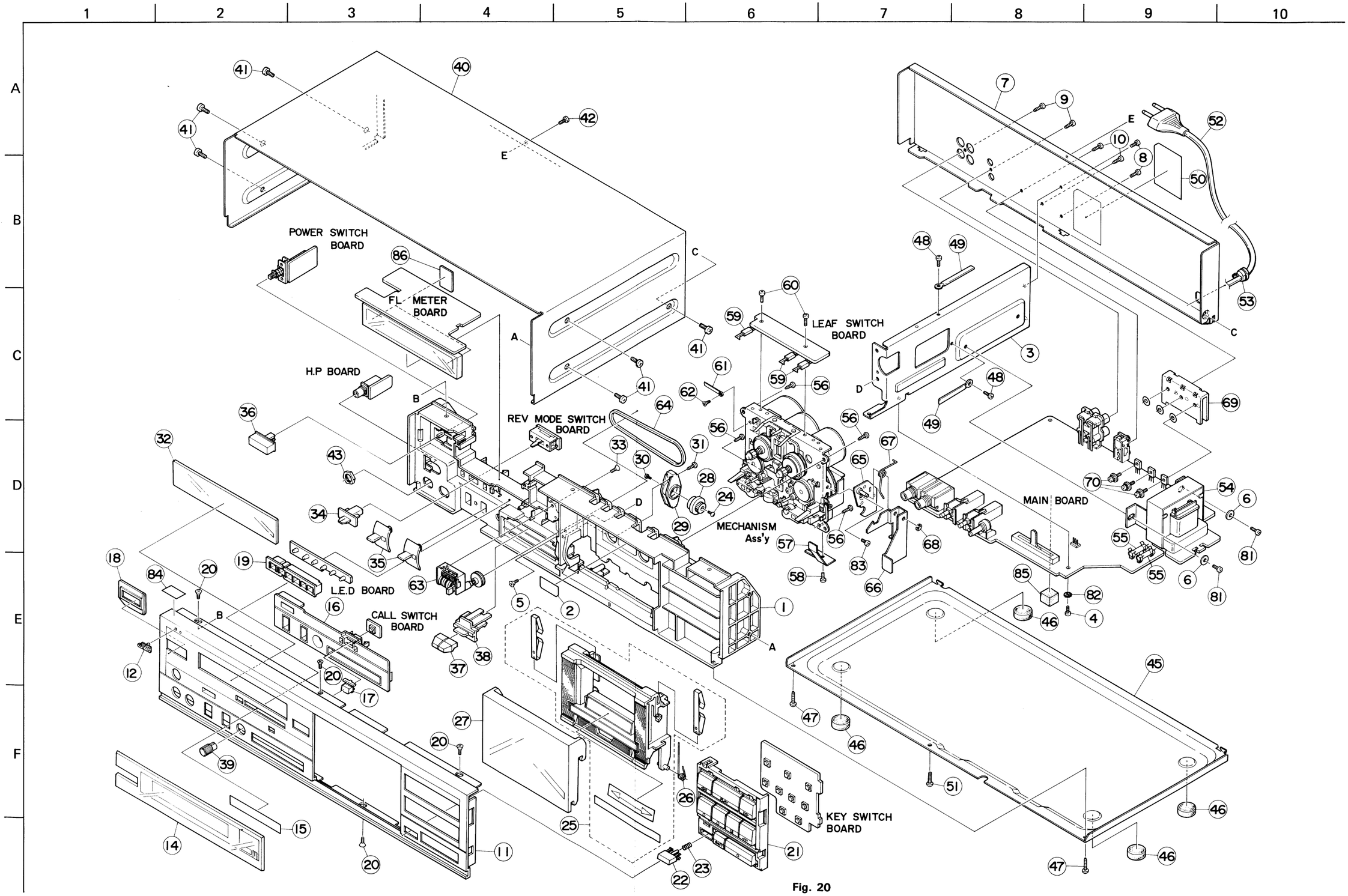


Fig. 20

Enclosure Assembly Parts List

⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	1	VJC1520-001	FRONT PANEL		1
	2	VJD4005-002	REFLECTION PLAT		1
	3	VKL3743-001	CENTER CHASSIS		1
	4	SDST3006Z	SCREW	P.W.B	1
	5	SSST3008Z	SCREW	FRONT PANEL	1
	6	QO3091-105	WASHER	TD-X501B(BK)	2
	7	VJC2173-008	REAR PANEL	TD-X501A/B/C/E/J(BK)	1
		VJC2173-009	REAR PANEL	TD-X501U(BK)	1
		VJC2173-010	REAR PANEL	TD-X501G(BK)	1
	8	SDST3006N	SCREW	R.PANEL+C.CHASSIS	2
	9	SDSF3008N	SCREW	PIN JACK+DCS	2
	10	SDSF3008N	SCREW	HEAT SINK	2
	11~19	ZCTDX501-FBK	FRONT PLATE ASS'Y		1
	11	VJC1521-001	FRONT PLATE		1
	12	E72968-001	MARK		1
	13	VYSA1R4-057	SPACER		1
	14	VJK3340-001	FINDER		1
	15	VYTT437-002	SHEET		0.075
	16	VJD3591-001	ESCUTCHEON		1
	17	VXP4347-010	PUSH BUTTON		1
	18	VJD4987-001	ESCUTCHEON		1
	19	VJD4992-001	HOLDER		1
	20	SSSF3008Z	SCREW	F.PANEL+F.PLATE	4
	21	VXP2003-001	PUSH BUTTON	MECHA	1
	22	VXP4349-00A	PUSH BUTTON	EJECT	1
	23	VKW3001-063	COMP.SPRING		1
	24	SBSB2004Z	SCREW		1
	25~26	ZCTDX501-CH	CASSETTE HOLDER ASS'Y		1
	25-1	VJT2129-001	CASSETTE HOLDER		1
	25-2	VJD4988-001	PLATE		1
	25-3	VJD4993-001	PLATE		1
	25-4	VKY4382-009	CASSETTE SPRING		1
	25-5	VKY4382-010	CASSETTE SPRING		1
	26	VKW3006-091	SPRING	C.HOLDER	1
	27	VJT3182-001	LID		1
	28	VYH5133-002	GEAR		1
	29	VYH5134-002	DAMPER HOLDER		1
	30	SPSK1720M	SCREW		1
	31	SBSF2608Z	SCREW		1
	32	VJD4615-010	FILTER	FL METER	1
	33	SBSF2606Z	SCREW		1
	34	VXS4041-005	SLIDE KNOB	REVERSE MODE	1
	35	VXQ4074-003	KNOB	NR&TAPE SELECT	2
	36	E72789-001	POWER KNOB	POWER	1
	37	VXS3017-001	SLIDE KNOB	INPUT	1
	38	VKS4783-002	SLIDE LEVER		1
	39	VXL4276-001	KNOB	BALANCE	1
	40	VJC2172-002	TOP COVER		1
	41	SDSB4010M	SCREW		6
	42	SDST3006N	SCREW		1
	43	VKZ4150-001	SPECIAL NUT		1
	45	VKL2235-002	BOTTOM COVER		1
	46	VJF4003-005	FOOT		4
	47	SBSF3008Z	SCREW		2
	48	SDST3006Z	SCREW		2

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	49	VKZ4001-011	WIRE HOLDER		2
	50	VYN2171-002PA	NAME PLATE	TD-X501B(BK)	1
		VYN2171-003PA	NAME PLATE	TD-X501A(BK)	1
		VYN2171-004PA	NAME PLATE	TD-X501C(BK)	1
		VYN2171-005PA	NAME PLATE	TD-X501E(BK)	1
		VYN2171-006PA	NAME PLATE	TD-X501J(BK)	1
		VYN2171-007PA	NAME PLATE	TD-X501U(BK)	1
		VYN2171-008PA	NAME PLATE	TD-X501G(BK)	1
	51	SDST3012Z	SCREW		1
⚠	52	QMP1200-200	POWER CORD	TD-X501C(BK)	1
⚠		QMP1200-200	POWER CORD	TD-X501J(BK)	1
⚠		QMP2560-200	POWER CORD	TD-X501A(BK)	1
⚠		QMP3900-200	POWER CORD	TD-X501E(BK)	1
⚠		QMP3900-200	POWER CORD	TD-X501G(BK)	1
⚠		QMP7600-200	POWER CORD	TD-X501U(BK)	1
		QMP9017-008BS	AC CORD	TD-X501B(BK)	1
⚠	53	QHS3876-162	S.R.BUSHING	TD-X501E(BK)	1
⚠		QHS3876-162	S.R.BUSHING	TD-X501U(BK)	1
⚠		QHS3876-162	S.R.BUSHING	TD-X501A(BK)	1
⚠		QHS3876-162	S.R.BUSHING	TD-X501G(BK)	1
⚠		QHS3876-162	S.R.BUSHING	TD-X501J(BK)	1
⚠		QHS3876-162	S.R.BUSHING	TD-X501C(BK)	1
		QHS3876-162BS	S.R.BUSHING	TD-X501B(BK)	1
⚠	54	VTP54A5-071BN	POWER TRANS	TD-X501C(BK)	1
⚠		VTP54A5-071BN	POWER TRANS	TD-X501J(BK)	1
⚠		VTP54G5-011BN	POWER TRANS	TD-X501U(BK)	1
⚠		VTP54M5-011BN	POWER TRANS	TD-X501G(BK)	1
⚠		VTP54M5-011BN	POWER TRANS	TD-X501E(BK)	1
⚠		VTP54M5-011BN	POWER TRANS	TD-X501A(BK)	1
		VTP54M5-011BNBS	POWER TRANS	TD-X501B(BK)	1
⚠	55	QMF51A2-R125	FUSE	TD-X501U F3	1
⚠		QMF51A2-R80	FUSE	TD-X501E F1,F2	2
⚠		QMF51A2-R80	FUSE	TD-X501G F1,F2	2
⚠		QMF51A2-R80	FUSE	TD-X501A F1,F2	2
		QMF51E2-R80BS	FUSE	TD-X501B F1,F2	2
	56	SSSF3010Z	SCREW	MECHA+F.PANEL	4
	57	VKY4296-001	SPRING	MECHA	1
	58	SDST2603Z	SCREW		1
	59	VSH1140-002	LEAF SWITCH		3
	60	SDST2608Z	SCREW		2
	61	VKZ4001-009	WIRE HOLDER		1
	62	SSSP2603Z	SCREW		1
	63	VKC5189-001T	COUNTER		1
	64	VKB3000-063	COUNTER BELT(R)		1
	65	VKL5919-00C	BRACKET		1
	66	VKL3751-001	EJECT LEVER		1
	67	VKW4613-001	SPRING		1
	68	REE2500	E.RING		1
	69	VMH4011-001	HEAT SINK	Q516,517,518	1
	70	DPSP3008Z	SCREW	REG.TRANSISTOR	3
	71	VND4003-046	FUSE LABEL	TD-X501U	1
	72	E48729-002	RIVET	TD-X501G(BK)DIN JACK	2
	73	SDSP3008N	SCREW	TD-X501U(BK)V.SELECT	2
	81	SDST3008Z	SCREW	P.TRANS	2
	82	WBS3000N	WASHER		1
	83	SDST2606Z	SCREW		1
	84	VND4006-017	CAUTION LABEL		1
	85	VYSH115-004	SPACER		1
	86	VYSH103-034	SPACER		2

Exploded View of Mechanism Assembly and Parts List

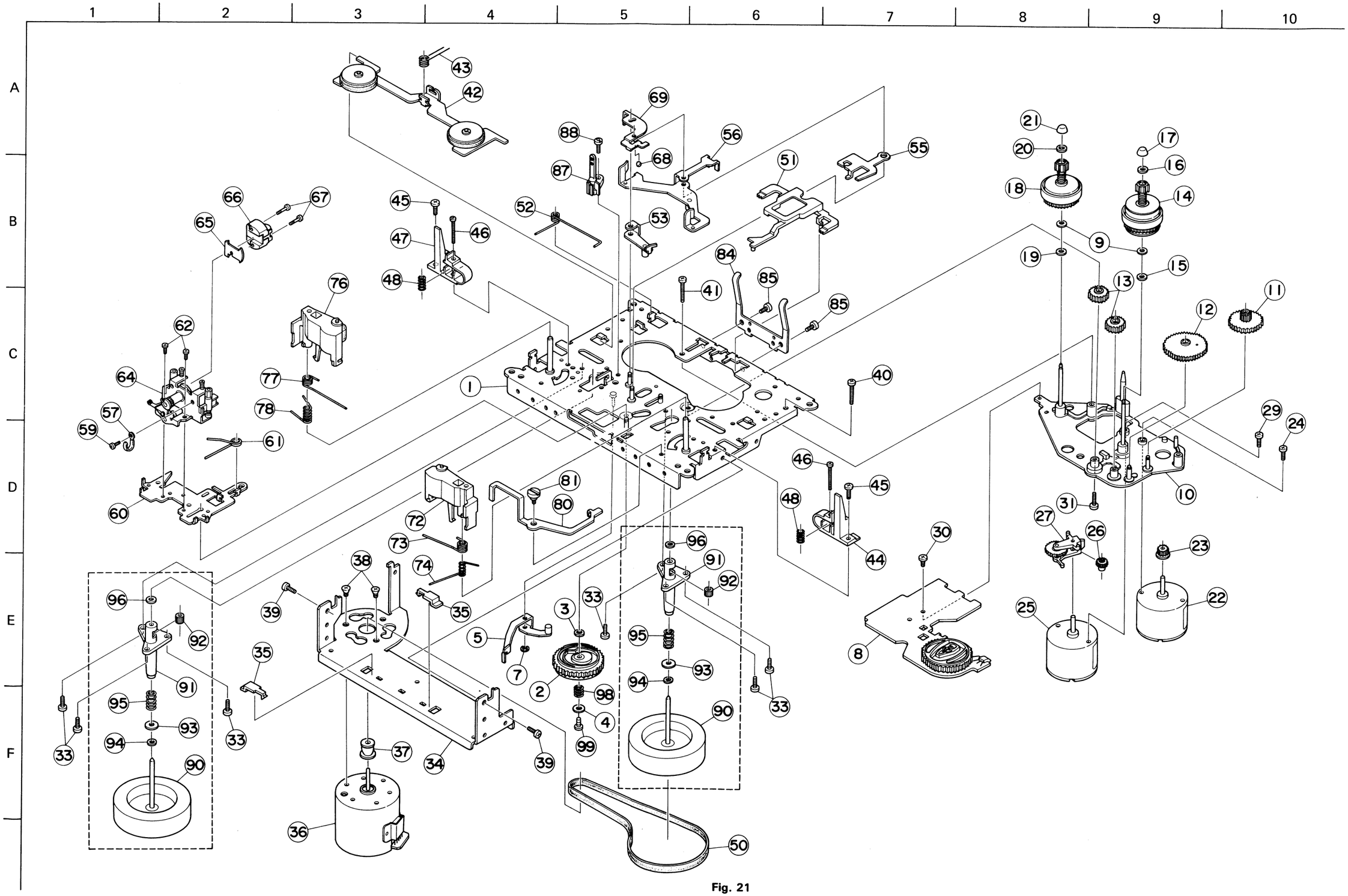


Fig. 21

Mechanism Assembly Parts List (1)

⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
		DN6838A	I.C.	ICM1	1
	1	VKL2251-00E	CHASSIS CASE		1
	2	VKS2122-001	P.ROLLER CAM		1
	3	VKZ4003-010	FELT		1
	4	VKZ4284-003	WASHER		1
	5	VKL5333-00C	HEAD LEVER ASY		1
	7	REE1500	E.RING		1
	8	VKZ3127-00D	SWITCH	CAM SWITCH	1
	9	Q03093-834	WASHER		2
	10	VKL2174-003	DISK BASE		1
	11	VKR3001-001	GEAR(2)		1
	12	VKR3001-002	GEAR(2)		1
	13	VKR3000-001	GEAR(1)		2
	14	VKR4312-00A	TAKE UP DISK(1)		1
	15	VKZ4003-010	FELT	BACK TENSION	1
	16	VKR4170-001	RING		1
	17	VKS4131-001	REEL STOPPER		1
	18	VKR4319-00A	TAKE UP DISK(4)		1
	19	VKZ4003-010	FELT	BACK TENSION	1
	20	VKR4170-001	RING		1
	21	VKS4131-001	REEL STOPPER		1
⚠	22	MMN-6C2RK	DC MOTOR	M5 CAM	1
	23	VKR4326-001	MOTOR GEAR		1
	24	SDSP2606Z	SCREW		1
⚠	25	MMN-6C2RK	DC MOTOR	M6 REEL	1
	26	VKR3000-003	GEAR(1)		1
	27	VKS4503-00D	ARM		1
	29	SDSP2606Z	SCREW	REEL MOTOR	1
	30	SDST2604Z	SCREW	CAM SW	1
	31	SDST2608Z	SCREW	D.BASE UNIT	1
	33	SDST2605Z	SCREW		6
	34	VKL3682-001	BRACKET		1
	35	VKS4437-001	THRUST PLATE		2
⚠	36	MMI-6A2HUA	CAPSTAN MOTOR	M4	1
	37	VKR4317-002	MOTOR PULLEY		1
	38	SSSP2604Z	SCREW	CAPSTAN MOTOR	2
	39	SDST2606Z	SCREW	FM BRACKET	2
	40	SPSP2615Z	SCREW	CAM MOTOR	1
	41	SPSP2613Z	SCREW	REEL MOTOR	1
	42	VKL3411-00A	TAKE UP IDLER		1
	43	VKW3006-099	TORSION SPRING	TAKE-UP	1
	44	VKS4815-001	TAPE GUIDE		1
	45	SDST2606Z	SCREW		2
	46	SPSP2615Z	SCREW		2
	47	VKS4816-001	TAPE GUIDE		1
	48	VKW3001-170	SPRING		2
	50	VKB3001-017	CAPSTAN BELT		1
	51	VKS3162-003	BRAKE BAR		1
	52	VKW4597-002	TORSION SPRING	BRAKE BAR	1
	53	VKL5316-00E	ARM		1
	55	VKL5318-003	ARM		1
	56	VKL3413-00B	P.R.LEVER ASY		1
	57	VKZ4001-013	WIRE HOLDER		1
	59	SPSH2018M	SCREW		1
	60	VKL3683-002	BASE		1

Mechanism Assembly Parts List (2)

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	61	VKW4467-003	SPRING		1
	62	SPSM2025M	SCREW		2
	64	VKL3793-00A	BASE		1
	65	VKZ4216-001	STOPPER		1
	66	VGH0425-524	R/P HEAD	H2	1
	67	VKZ4291-002	SCREW		2
	68	T41615-004	STEEL BALL	HEAD BASE	1
	69	VKY4425-002	SPRING PLATE		1
	72	VKP4169-00B	PINCH ROLLER		1
	73	VKW3006-130	SPRING	PINCH ROLLER(R)	1
	74	VKW3006-142	SPRING		1
	76	VKP4171-00B	PINCH ROLLER		1
	77	VKW3006-131	SPRING	PINCH ROLLER(L)	1
	78	VKW3006-060	TORSION SPRING		1
	80	VKL5926-001	LEVER		1
	81	VKZ4323-001	SCREW		1
	84	VKY4279-001	PACK SPRING		1
	85	SDST2604Z	SCREW		2
	87	SPI-302	REFLECTOR		1
	88	SDST2606Z	SCREW	REFLECTOR	1
	90	VKF3138-00C	FLY WHEEL		2
	91	VKF4122-00C	METAL BUSHING		2
	92	VKR4180-002	ROLLER	TAKE UP	2
	93	Q03093-622	WASHER	THRUST	2
	94	Q03093-827	WASHER	THRUST	2
	95	VKW3001-010	SPRING	THRUST	2
	96	Q03093-522	WASHER	OIL CUT	2
	98	VKW3001-159	SPRING		1
	99	VKZ4340-001	SCREW		1
		DN6838A	I.C.		1

Packing and Packing Parts List

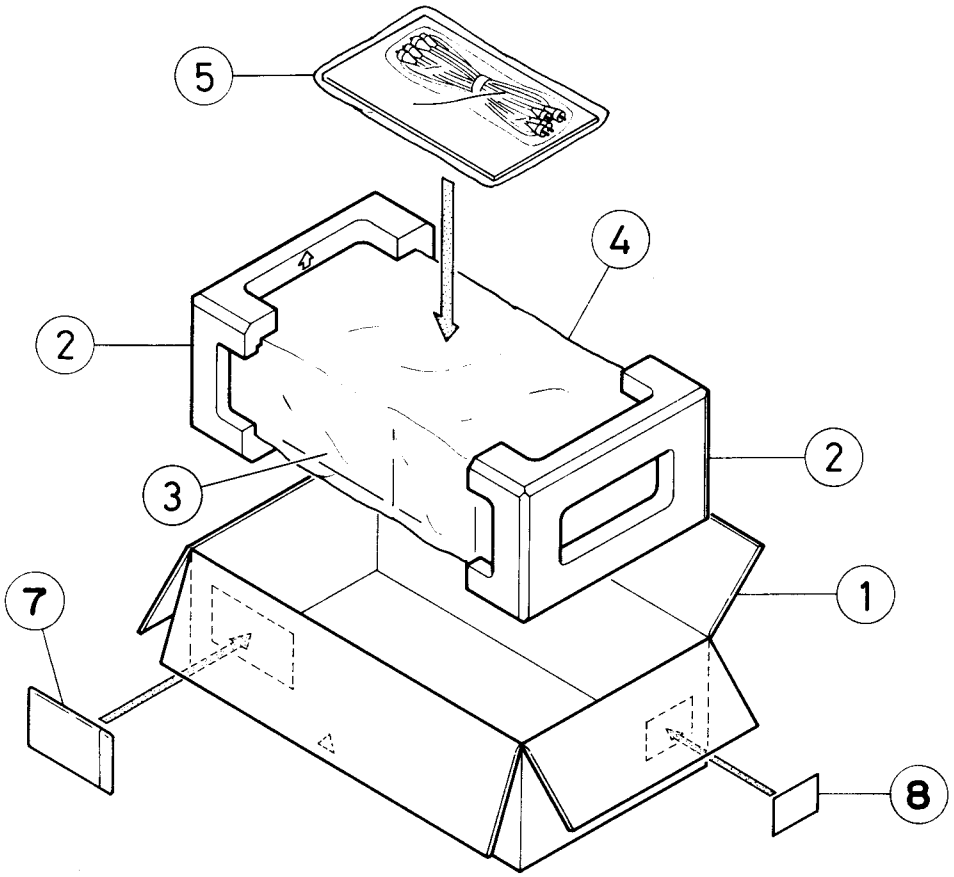


Fig. 22

Positions of control switch and knob at renewed packing

COUNTER	000
POWER	⏻ STAND BY
R. MODE	⊃
NR SYSTEM	OFF
TAPE	NORMAL
INPUT BAL.	CENTER
INPUT LEVEL	MIN
DIRECTION	FWD

Packing Parts List

⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
	1	VPC2171-002	Carton	TD-X501 B	1
		〃 -003	〃	TD-X501 A	1
		〃 -004	〃	TD-X501 C	1
		〃 -005	〃	TD-X501 E	1
		〃 -006	〃	TD-X501 J	1
		〃 -007	〃	TD-X501 U	1
		〃 -008	〃	TD-X501 G	1
	2	VPH3165-002	Cushion		2
	3	VPK4002-006	Sheet	for Set	1
	4	VPE3005-025	Poly Bag	〃	1
	5	〃 -007	〃	for Accessories	1
	6	Q04141H	Wire Clamp	for Power Cord	1
	7	E66416-003	Envelope	TD-X501 J/U	1
	8	VPZ4001-001	Serial Ticket		1

Accessories

⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	Parts No.	Parts Name	Remarks	Q'ty
	VMP0039-00A	Pin Cord Ass'y		1
	EWP805-001	Remote Wire		1
	VNN2171-212	Inst. Book	TD-X501 B/E/G	1
	〃 -621	〃	TD-X501 A/C/J/U	1
	〃 -411	〃	TD-X501 E	1
	VND4113-001	G. Caution	TD-X501 B/J	1

JVC

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